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ABSTRACT

A two-phase survey was conducted to examine the impact of the "Report on the Conference on the Use of Stimulant Drugs in the Treatment of Behaviorally Disturbed Young School Children" (Freedman Report) upon its intended audience. Questionnaires were mailed to professionals (in medicine, psychiatry, and education), public managers (for education and public health) and both randomly selected and concerned laymen (those who had requested information on hyperkinesis); the 1,673 returned questionnaires were evaluated for awareness of drug treatment and attitudes toward its use, dissemination and effect of the Freedman Report, and sources of information about hyperkinesis. Among the results were that most respondents were aware of drug treatment, that the Freedman Report was best known among professionals in medicine and least known among laymen, and that the principal source of information on child hyperkinesis was professional literature. Recommended were the development of a dissemination base and publication of future communications with design and appearance consistent with audience preference. (Included are figures such as a graph on the search for index medicus for journal articles and attachments including literature on hyperkinesis.) (SB)

GW-BSCP-72-07R

A STUDY OF PUBLIC COMMUNICATION CRITICAL TO CHILD HEALTH CARE

Final Report

6 August 1972

Prepared for:

Office of Child Development
Department of Health, Education, and Welfare

Grant Number OCD-CB-95-E

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SUMMARY AND HIGHLIGHTS

This sections contains a brief overview of the project. Each major topic - background, method, findings and conclusions - is discussed more fully in the body of the report. The attachments also contain data upon which the report is based.

This final report describes the research performed under the Office of Child Development grant number OCD-CB-95-E. It contains the results of a two-phase survey about perceptions of professional and lay groups on the subject of child hyperkinesis. The first questionnaire was mailed in September-November 1971; the second in February-March 1972. Both phases dealt specifically with the *Report of the Conference on the Use of Stimulant Drugs in the Treatment of Behaviorally Disturbed Young School Children*. Our conclusions from the study form the basis for recommendations on future scientific communications.

The nature of the *Freedman Report* is significant to an understanding of the research results. The report was intended to be an advisory report for professionals and lay public. It reflects present knowledge about hyperkinesis and clearly acknowledges uncertainties about the cause or causes. Recognizing both the medical and behavioral interpretations of the symptoms, it reports the conclusions of the conferees regarding the use of pharmacotherapy under careful diagnosis and regular monitoring of every case when such treatment is found to be effective.

This study had one primary objective: to measure the effectivness of the *Freedman Report*. Two related objectives were posed with a view toward utilizing the case of the *Freedman Report* to gain insight into topics which would impinge on future scientific communications from a federal agency. These objectives were: (1) to determine who makes changes in opinion on such topics as this; and (2) to determine how an agency maintains its consensus - what modes and channels of communication are most effective.

The principal sources of information were: (1) a review of the professional literature on hyperkinesis, (2) a survey conducted by two successive questionnaires, (3) interviews by telephone or in person. The initial questionnaire was mailed to a national population of 1410 identified individuals Selection was made from contacts and referrals, published directories of professional societies and from requests for copies of the *Freedman Report* that had been received by DHEW. The second questionnaire (of which 2946 were mailed) was addressed to critical populations (physicians, psychologists, school administrators, teachers and laymen). These were sent to four cities selected from interview data so that three locations were known to have experienced public concern. The fourth was a control city where there had been no controversy about modes of treatment, but which has an active program of treatment for hyperkinetic children.

The task of assessing the impact of the *Freedman Report* required an investigation of competing communications and collecting data on respondents' perceptions of the issues involved in the use of pharmacotherapy for hyperkinetic children. The initial questionnaire sought to identify perceptions

of the issues involved in the treatment of hyperkinesis. The second, derived from the issue perceptions found in the returns of questionnaire one, was aimed at collecting a spectrum of opinion representative of similar populations.

While, of course, we cannot tell what the bias of non-response is, the result was that the initial questionnaire received a 54% response; the second resulted in a 31% return. The returns from the final questionnaire were thought to be constrained by the reluctance of public educators to cooperate in a project which addressed a volatile and sensitive topic. This was anticipated when the first questionnaire elicited almost no response from state school health officials and from the unwillingness of some school administrators to provide names of classroom teachers. Returns from laymen were expected only when there was either a direct interest in hyperkinesis or a clear concern for the welfare of children. The costly delays encountered in developing the populations for questionnaires must be acknowledged as a serious obstacle to the progress of the research.

Major Findings

Ranking of findings is in part a matter of viewpoint. However, those selected for this section are representative of the principal topics of the study: awareness of the issues involved, the impact of the *Freedman Report* and sources of information claimed by respondents. An expanded discussion of these and other findings is contained in the section titled FINDINGS OF THE SURVEY.

Awarensss of Drug Treatment and Attitudes Toward its Use

All but 12% (95) of the 746 respondents to the first questionnaire reported that they were aware of drug treatment. Many recalled the issues that had been raised and criticisms that had been made in public expressions of concern. Those most commonly remembered were also issues treated in the *Freedman Report*:

Misuse, overuse, or indiscriminate use of drugs (177)

Potential addiction (151)

Danger of side effects (106)

Unwarrented control of child behavior (103)

Inadequate diagnosis, assessment or follow-up (96)

Despite somewhat equivocal responses, not more than 6% of the returns to the first questionnaire could be interpreted as seeing medication as threatening. Not more than 4% were wholly adverse to medication.

Dissemination and Effect of the *Freedman Report*

The *Freedman Report* was known to 235 (31%) of respondents to the first questionnaire. Not surprisingly, some of those who had received the report by direct mailing were not familiar with it (15% among responding doctors). The report was best known among professionals in medicine and psychology and least known among laymen. It was surprisingly well known among educators as a result of republication and announcement in the professional journals.

The *Freedman Report* was reported by a small number as effective in changing professional and management behavior. For instance, three persons reported that they had changed the mode of treatment for the disorder. There were seven respondents who claimed establishment of new medical screening programs; 18 who used the report to convince parents or the community of the propriety of treatment; and 32 used it in workshops or staff information programs.

Sources of Information about Hyperkinesis

The principal source reported by respondents for acquiring knowledge of child hyperkinesis was professional literature. Group 1 physicians and psychologists, (first questionnaire) depended on journals followed by professional meetings and colleagues. Several cited their own research. Newspapers were an important source also. Newspapers were cited by 231 as compared with 442 who named journals (multiple responses in some instances). Teachers and managers gave a similar response. Laymen, on the other hand, depended primarily on the newspapers. A very few cited colleagues, meetings, friends (only one) and the school. Radio and television were cited by only 16 compared with 55 who cited newspapers. No one cited the PTA.

Conclusions and Recommendations

Conclusions and recommendations are contained in the last section of the report. A summary statement indicates their nature:

The *Freedman Report* reached a number, but by no means all, who could benefit from it. Ordinary modes of distribution reached a major number of

medical professionals, fewer educators and some parents or concerned laymen. These concerned populations were generally well aware of the issues discussed in the report and in agreement with its findings. It did not significantly reach a leader category of individuals in official or community positions.

Medical professionals who would be the most able to assimilate the report found it reassuring to themselves and useful as a basis for convincing others of the propriety of drug treatment.

Political and community leaders, whose role in scientific questions becomes active only when there is a perceived threat or hazards, are not in the usual communication path for receiving scientific information which conventionally follows established modes within disciplines. When public concern does erupt, these people are unlikely to be adequately informed to interpret conflicting views.

Recommendation

A federal agency with scientific information to communicate should concentrate on reaching the professionals and laymen directly concerned. It should have a prearranged path of communication which can reach the target audiences when vital issues of child welfare are involved. A suggested means is contained in section VI.

I. INTRODUCTION

This project is an examination of the impact of a federal report upon its intended audience, the *Report of the Conference on the Use of Stimulant Drugs in the Treatment of Behaviorally Disturbed Young School Children*, which treats findings of a panel chaired by Dr. Daniel X. Freedman. That report will hereafter be referred to as the *Freedman Report*.

The primary objective was to determine the effect of a particular communication (the *Freedman Report*). For this it was necessary to find if the report reached its intended audience and to determine what it achieved in conveying authoritative, scientific information.

No document is altogether effective in reaching those who need the information which it contains. In every case other communications, written or informal, intervene in transmitting fact and opinion. The *Freedman Report* is therefore studied in context of competing communications, and this study also examined the means by which professionals and laymen have acquired information concerning child hyperkinesis, with particular emphasis on the role of the *Freedman Report*.

A special circumstance makes hyperkinesis an uncommon, though not unique, topic of concern. Most scientific information is communicated to other scientists through established channels. But the scientist's background and understanding cannot be communicated to lay audiences so readily. A topic which touches on the well-being and education of children encounters intense

feelings of concern among many groups of laymen including parents. Hence, the importance of reliable and properly disseminated information cannot be overstressed. The evident care and deep concern shown by many respondents in their replies to this survey attest to the felt need for information and understanding. To the extent that the findings of this study lead to a clearer understanding of the mechanisms of communication, it should be possible to develop and disseminate scientific information with a greater certainty of reaching the desired audiences, taking into account their varied nature and their preconceptions of the issues involved.

To meet the objective we needed to find from the sample how many respondents had read or were familiar with the *Freedman Report* and to learn whether it had led them to modify their approach to the treatment of children diagnos as hyperkinetic, or alternatively, whether it confirmed or clarified their understanding of this complex condition.

The problem was complicated by the passage of time. Public concern and media coverage were activ . the autumn of 1970. The *Freedman Report* appeared in March 1971 and this survey was made in late 1971 and early 1972. While change in opinion over time can be detected by a time series of surveys, retrospective measurement of change must be treated with caution. Statistics from such a study as this must be recognized as being based on human memory which is unreliable at best.

The combination of circumstances which this study has examined is exceedingly complex, making generalizations hazardous. But the findings can

illustrate what may happen when an unresolved medical problem, competing sets of information and an aroused public concern coalesce around a sensitive issue such as the welfare of young children.

A major concern in this project has been the problem of developing the populations to be surveyed, especially for the second questionnaire. Of the groups chosen, only pediatricians, psychiatrists, state education and health officials could be identified from publicly available directories. To reach teachers, interested laymen and parents it was necessary to rely on assistance from local sources, first to select localities for the second questionnaire and then to build the sample populations. In no instance were we able to mail directly to parents of hyperkinetic children. Questionnaires for these groups were mailed locally by organizations or individuals who thereby protected the identity of the respondents. The time required to develop cooperation proved to be far greater than had been expected. Even then, some cells had to be abandoned when promised cooperation was withdrawn.

II. BACKGROUND FOR THE STUDY

Hyperkinesis as a subject for medical and behavioral research is not new, nor is the use of medication for its treatment. Prescription of amphetamines was reported in 1937 by Bradley.[1] Since that time, studies have employed various central nervous system stimulants, tranquilizing agents and anticonvulsants. As presently described, hyperkinesis is perceived as both a medical and behavioral problem. It is variously termed 'minimal brain dysfunction', 'hyperkinetic disturbance' and less accurately 'hyperactivity'. From a comparative review of prior research, Millichap and Fowler concluded in 1967 that there exist a variety of syndromes and that there is no specific treatment available.[2]

In these circumstances, management of children concerned has been a difficult matter involving conflicting professional views, uncertainties and inadequate knowledge, particularly in the absence of well-controlled, long-term studies. In 1968-1970 a complicating variable was interjected--the rise of public concern about the propriety of using stimulant medication for treatment of young children when the object of treatment is to bring about behavioral modification. This issue was reflected in the news media. The discussion reached national level in 1970, when bills were introduced in both the Senate and the House of Representatives for the purpose of defining the federal role.

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[1]Bradley, C. The behavior of children receiving benzedrine. *American Journal of Psychiatry*, 94:577, 1937.

[2]Millichap, J.G. and G.W. Fowler. Treatment of "minimal brain dysfunction" syndromes. *Pediatric Clinics of North America*, 14:4, 1967.

A review of the public media indicates that the subject had become the basis for associating the use of pharmacologic therapy in behavior modification with such topics as 'mind control', attempts to force conformity among minority group pupils and similar issues which lie outside the scientific domain of the medical professionals. Such events are a natural outcome of scientific uncertainty. When such misconceptions arise, professionals are unable to intervene and settle differences of opinion because they lack the evidence of conclusive research. The practitioners, in these circumstances, are unable to explain to laymen and managers how the best judgement of the scientists or physician is applied in the face of uncertainty. Unfortunately, the scientist is unable to communicate to the layman how, in instances of uncertainty, he resorts to statistical judgement of risk. Neither is he able to defend his conclusions based on probabilities in the absence of 'proof' in the dialog of popular controversy.

In this instance, there was notable confusion, particularly among the informed population because much of the media coverage was based on shock value of revealing that stimulant drugs were used on hyperkinetics. Laymen tend to see the decisions of scientists as having been reached by a process which is obscure or even secretive. When the conclusions of science become the basis for a technology which touches closely upon human values, when that technology is applied or administered by secondary, non-scientist agents, such as schools and clinics, who might have something to gain, when those agents do not understand or cannot fully explain the scientific basis of the technology, finally, when it is realized that scientists are themselves uncertain, that technology can be seen as threatening.

In January 1971, a panel of experts was invited to confer under the sponsorship of the Office of Child Development and the Office of the Assistant Secretary for Health and Scientific Affairs, Department of Health, Education, and Welfare. The conference was assembled to discuss the use of stimulant medications in the treatment of elementary school-age children with behavioral disturbances. It met under the chairmanship of Dr. Francis X. Freedman and a report was published in March 1971, focused on those disorders that are being treated with stimulant medications, centrally hyperkinesis. It addressed the issues that had caused expressions of public concern and that had been presented in the public media. The conference, although strongly representative of university-based professionals, included at least one member strongly opposed to the general use of stimulant drugs for treatment of hyperkinetics. It did not, however, include any representation of the classroom teacher who is confronted with this problem, parents of such children or publicly known leaders of any profession who may have been concerned with the social or minority issues raised during the months of public debate and media publicity. Copies of the report were mailed by the Department to all members of the American Academy of Pediatrics, the American Association of Child Psychiatry and to each school district. A tabulation of 3,490 requests to DHEW for copies of the report shows that the largest number were from school principals, superintendents and schools. (See Attachment E)

The task confronting the conference was indeed complex. Expert, experienced opinion was need to describe and present what is now known about a dysfunction which clearly needs onsiderably more research into causes and

extensive training in its treatment. The audiences addressed were representative of all those concerned--physicians, child psychiatrists, psychologists, school administrators, teachers and parents--all of whom have a direct concern for the welfare of young children.

This background suggests a number of causes which could have led to differing perceptions of the issue of stimulant drug treatment for hyperkinesis. Certain points are considered significant both for their role in the particular case and because of their potential for creating a similar situation in the future on the same or a comparable topic.

- Professionals are themselves uncertain. They disagree on technique and emphasis, although they are generally agreed concerning the usefulness of drug and alternative therapies. They are uncertain concerning means and reliability of diagnosis, values of treatment modes, assessment of hazards and interpretations of available research. Laymen and non-scientist managers in education and public health can and do recognize these uncertainties.

- The technology of medical treatment for learning disorders is still an immature technology in the sense that it lacks an established and generally accepted disciplinary structure.

- There is no set of established media vehicles for communicating that technology from the domain of medicine to the grade school teacher who encounters the classroom problem nor to the lay parent who must decide whether recommended treatment shall be given. Medical opinion of the role of mass media in conveying useful medical information was found by O'Keefe to be highly critical of the accuracy and completeness of reporting, characteristics which were believed

to prevent news stories from serving an educational function.[1]

- There have almost certainly been abuses and errors in judgement made by professionals and public management, although no single case is clearly documented. Among such errors, even if recounted from heresay, some illustrations are pertinent:

  Teachers or schools have provoked parents by suggesting that children may be hyperkinetic.

  Physicians have been too ready to prescribe medication on the basis of behavior described by parent or teacher.

  Students under medication have received inadequate follow-up, evaluation of therapy, or adjustment of dosage level.

The climate of public information by 1969-1970 was, therefore, basically unstable. The public had at hand no systematic information on child hyperkinesis, nor its treatment, but did have at hand fragments of information which could be coalesced into a perception of a threat to public and individual welfare.

This was the general context of events and opinion when the Freedman panel met and issued its report. The research project described in this report was started in June 1971 and completed in May 1972. No single event or new development relating to the treatment of hyperkinesis occurred during that time to singularly alter the circumstances being studied.

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[1] O'Keefe, T. The mass media as sources of medical information for doctors. *Journalism Quarterly* 47(1):Spring, 1971.

III. METHOD OF THE STUDY

A. General

The general scientific method of this study was observational in the sense described by Siever,[1] with an historical underlay. The nature of the phenomena under examination limits the extent to which objective measures could be applied. The domain of inquiry included past events, human behavior not practically observable, and states of opinion or 'informedness' which were under change during the course of study. The methods were, therefore, a mix in which historic documentation was used to verify past public communications; observational methods were used to tentatively identify other variables in an exploratory manner and with anecdotal 'case' documentation of interviews; finally the comparative method was used at two points, with opinion survey techniques, to test tentative findings and quantify the opinion variables.

B. Sequence of Research and Instruments Developed

The processes which were followed and the instruments developed to collect and record the research data are described below. The sources were: (1) literature in its several forms collected from scientific journals, popular press (both serials and newspapers) and media presentations: (2) individuals engaged in the study of hyperkinesis, management of schools,

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[1]Siever, Raymond. Science: observational, experimental, historical. *American Scientist*, 56:1. 70-77. 1968.

and education and lay persons in organizations concerned with the welfare of children; and (3) interval samples of populations randomly chosen to receive questionnaires.

Literature

The literature was collected to provide a knowledge of the history and status of the research on hyperkinesis and to constitute a record of public and media concern about the issues surrounding the use of stimulant drugs for treatment. The professional literature also provided identification of central figures in the research community and some insight into the paths of communication. An analysis was made of the medical and education literature as it was reflected in the major information services of the two disciplines--MEDLARS of the National Library of Medicine and ERIC (Education Research Information Center) of the Office of Education.

Development of the First Questionnaire

Calls and contacts were initiated to persons who were identified from the literature as having a presumed role or interest, or who were suggested by other persons contacted. Information was elicited concerning perceptions of issues, sources of information, and identification of persons and institutions concerned. Interviews were documented by the researchers in the form of telephone logs and 'contact reports'.

From a review of the literature, particularly the newspaper accounts of discussion at various locations, and from conversations with individuals throughout the U.S. concerned with the management of hyperkinesis who

would reflect a national opinion, it was possible to define a set of critical populations and establish a set of issues for a questionnaire. The description of the sample structure and its refinement in subsamples are shown in Attachment A. The sources used to identify individuals within each subsample are also shown in Attachment A. A summary of the issues which we perceived to surround the problem of treatment for hyperkinetic children is shown in Attachment B. Collectively, these issues formed the basis upon which the first part of the survey was conducted in September-November 1971.

C. Instruments: First Questionnaire

The first questionnaire tested assumptions of the tentative models as to how and by whom the issues were perceived as a result of what modes of communication.

1. Sampling Method: Target Populations

a. The critical populations were assumed to consist of four major categories as follows: (Numbers represent coding used in records)

1.0 Professionals in medicine, psychiatry and psychology.

2.0 Professionals in education at the working level, including school nurses, and counseling psychologists.

3.0 Public managers in the chains of authority for education and public health, including district-level school superintendents, their deputies, and similar officers.

4.0 Concerned laymen including parents, community activists, church and media leaders, and lay persons who had written

to the Office of Child Development for information on hyperkinesis.

b. In order to insure that each of these categories was filled with a widely representative sample, subcategories were selected. Each subcategory represented a sector of the major category for which available information existed confirming the identity of respondents and their mailing addresses. Thus category 1.0 (medical and related professionals) contains 9 subcategories. For examples:

1.13 American Psychological Association, members in clinical child practice.

1.21 Fellows of the American Academy of Pediatrics.

c. A total of 35 subcategories were identified and are listed as Attachment A. In each category a source document, typically the most current membership list of an association, was used as a source. Sampling was by:

- decimation through the list for one or more cycles (clarified in Attachment D)
- elmination of certain kinds of respondent (i.e. emeriti, foreign)
- elimination of selections from any state or area for which the selection matrix was complete in order to ensure a national geographic distribution
- elimination of respondents in general from Washington, D.C. and its suburbs (Due to the high mobility of professionals into and out of Washington, a disproportionately large number of actual returns was received from Washington in all categories except 4.0, laymen. This presumably indicates

that several respondents moved into the Washington metropolitan area after publication of the membership list from which they were identified.)

- further identifying persons in each subcategory as:

  having received a copy of the *Freedman Report* by direct mailing from OCD;

  not having been sent such a report

  creation of an artificial subsample (Since normal sampling procedure yielded, for most categories, an imbalanced propostion between those persons who had received the report and those who had not, a third group was identified whose addresses were furnished to OCD. OCD then mailed the addressees copies of the report and created an artificial population of persons who had received the *Freedman Report*. Mailing of questionnaires to this group was delayed until 2 or more weeks after the report had been sent to the members of this group.)

d. The resulting population is describable by a matrix of dimensions 35 X 3 (Attachment A) where 35 is a vertical listing of subcategories (Professional and lay identity) and 3 is a horizontal identification of respondents who (1) received the report initially, (2) were not sent the report, and (3) were sent the report at the request of the researchers.

e. Thus a basic sample matrix of 4 X 2 (four population categories crossing the two categories--did/did not receiving mailing of the report) was expanded for purposes of constructing the sample to a matrix of 35 X 3. Attachment A shows that matrix with the numbers of questionnaires mailed and returned in each matrix cell. Attachment A also lists and describes the subcategories more precisely. Attachment C describes the decimal coding system by which matrix cells are identified.

f. Fail-safe coding was provided by using various combinations of 2, 6, and 8 cent special-issue stamps on the return envelopes, a procedure which facilitated the sorting of returns, yet was unobtrusive. The identity of individual respondents was protected and therefore not identifiable by the researchers.

2. Preparation of the Questionnaire:

a. A compilation of the issues was prepared (Attachment B). The issues listed constituted a shopping list of matters which could possibly be of interest in the initial questionnaire. Sources of 'issues' were:

(1) the hypothesized model of perceived issues (referred to earlier) which describes the researcher's reasonable presumptions as to how various concerned people view the syndrome and treatment, with the varieties and ranges of opinion possible

(2) perceptions of issues from the professional and lay press.

(3) perceptions of issues reported in the Gallagher Committee Hearings[1]

b. After consultation with the George Washington University Social Research Group (SRG), the researchers reduced the issues to a set

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[1]Hearings of a subcommittee of the House of Representatives on Government Operations: Federal Involvement in the Use of Behavior Modification Drugs on Grammar School Children of the Right to Privacy Inquiry. The Hon. Cornelius Gallagher Presiding. 29 September 1970. USGPO.

of questions which constituted the questionnaire (See Attachment F). That set of questions begins with two questions (#1 & #2) which separate those respondents who are not aware of the matters under study and those who are. The set also uses open-ended questions to elicit a maximum diversity of response.

3. Processing

Responses were classified and coded by the Social Research Group. Response data were reduced to a punched-card format and analyzed from a printout of responses in the following dimensions: 4 major categories X 2 conditions of having received/not received the *Freedman Report* X total possible responses to a total of 13 questions.

D. Instruments: Reports of Contacts with Individuals

This study sought to examine professional and lay perceptions of problems in the application of scientific knowledge and to explain those perceptions in terms of the public communications from which they are derived. This problem was at first attacked by an exploratory method using interviews which were documented in anecdotal case reports termed 'Contact Reports'. The role of these interviews was primarily to gain insight into these exploratory contacts. The reports were serialized using a three digit code. Later certain exchanges of letters proved important and were entered into serialization. A total of over 500 contacts were serialized.

Early contact reports dealt principally with the acquisition of contacts, advice on preparation of the issues, and administrative assistance in fielding the questionnaires. So much valuable opinion data appeared as a byproduct of those interviews that the method was continued.

Interviews were identified from:

- public records: professional listings, lists of office holders, publications of the respondents
- chains of referral: approximately 80% of contacts were suggested by a prior contact
- respondents who replied to questionnaire 1 giving their names and addresses
- later requests for information to OCD

Most of the respondents for contact reports were persons who hold professional and official positions of trust. A concerted effort was made to reach as many persons as possible. A substantial number of parents were contacted in this way.

Many of these contacts were clearly intended to be private communications and in many cases respondents were assured that their comments would remain confidential.

E. Instruments: Second Questionnaire

The second questionnaire was a final measure of assumptions concerning public and professional perception of issues and sources of information (See Attachment J). This questionnaire was the principal measure of the effectiveness of the *Freedman Report*.

1. Sample populations:

a. The critical populations were assumed to consist of the four major professional and lay categories recognized by the first questionnaire (medical, educational, leadership and lay) with differentiation of the education sample and lay sample into two categories each. Differences in the sample between this questionnaire and the first questionnaire were due to increased understanding concerning the populations of interest and exigencies of the cities chosen as survey sites.

b. In most cases the sampling method was simply to collect all verifiable addresses of persons who met the sample criteria until the sample matrix was filled, or until no more names could be located. This resulted in some short samples: for instance, in city 4 the total medical community did not contain 200 persons who met selection criteria.

(1) In a few cases selection by decimation was possible as for educators in city 3, who were selected from the school directory.

(2) In a few necessary cases, where names could not be directly procured, questionnaires were furnished to local persons who agreed to distribute them appropriately. This procedure was used for all sample 6 (special parents). This method failed in cities 1 and 2 . In city 1, after the mailing was closed out, 280 cases of the sample were lost when a local

PTA decided that the questionnaire was potentially embarrassing and returned the questionnaires. In city 3 inspection of returns shows that 160 mailings which were promised by a local OEO agency did not in fact occur.

(3) Identification of respondents by race was not feasible.

2. The resulting population may be described by a matrix of dimensions 4 X 7 where 4 is a vertical listing of 4 cities selected and 6 is a horizontal listing of respondent professional and lay categories. In city 3, category 5 is replaced by category 7. In city 2 category 5 is empty.

a. Physicians

Professionals in medicine were referred to as 'physicians' for brevity although some related professionals are included. Physcians, psychiatrists and clinical psychologists, selected in each city to represent that community most likely to make contact with children and to make first instance medical identification of potential cases of hyperkinesis, or to diagnose and treat hyperkinetic children, were included in this category. The sample contains not more than 5% paraprofessionals and nurses who do screening at clinical levels. Such nurses would not include school nurses.

b. Special Educators

This category is comprised of professionals in the public schools teaching in special education or working primarily with

neurologically handicapped, including a sampling of guidance counselors, school nurses, school psychologists on full-time staff, and administrators in special education. It includes some teachers of the deaf, speech therapists and reading therapists.

c. Classroom Teachers

Using the above criteria these individuals are those individuals not classifiable as 'special educators', but are within the school system.

d. Leaders

30-40% of this sampling were administrators at local and state levels in the chains of authority for education and public health. In some selected instances, officials in juvenile law enforcement and child welfare were chosen. In this category 30-40% were elected officials in education, such as members of school boards and state boards of education. Also included in this category of elected officials were members of city councils and state legislatures who represented all districts under study and members of legislative committees directly concerned with policy in education, public health and child welfare. The balance of the sample included opinion makers and other leaders, i.e.: labor, press, community organizations, OEO fundcd community project leaders.

e. Laymen

Laymen included random sampling of parents of children in public schools. This category was replaced by category 7 (Random sample) in city 3 and was not highly successful generally in other cities.

f. Special Parents

Parents of diagnosed hyperkinetic children were defined as special parents.

g. Random sample

In city 3, three hundred (300) persons were selected at random from the telephone directory.

3. Cities are fully described in the City Profiles under 'Findings'. Cities 1, 2 and 3 are cities in which public controversy is perceivcd as having been active in the recent past, i.e. 1970-71. City 4 is a control case in which there is an active program of diagnosis and medication but no significant perceived controversy. Identities of the cities are confidential.

4. The identity of respondents to matrix cell was preserved by unobtrusive coding of the return envelope. This was done through the use of a special issue postage stamp. Individual identities of respondents were protected and cannot be recovered by the researchers.

5. Responses when received were classified, coded and reduced to punched card format.

F. Critique of the Method

The method was generally a conventional approach using mailed questionnaires supplemented by interviews with selected individuals. One overriding principle determined much of the procedure and the effort required: critical rather than general populations were considered essential to reach respondents who might recognize and understand the subject being studied. Regardless of the publicity given to hyperkinesis in the 1969-1970 period, the topic is highly specialized and some measure of 'informedness' was essential if the population surveyed was to produce a useable result.

To develop the mailings for critical populations it was necessary to seek and depend upon cooperation of medical and education professionals as well as community service organization leaders. Administrators in public school systems were the key figures in obtaining the names of teachers.

Several withdrew their promised assistance, making that category exceedingly slow to develop. In two cities, parents of hyperkinetic children (impacted parents) were unavailable. In consequence, this category had to be abandoned in the two locations.

In spite of the care used to select individuals many disqualified themselves by acknowledging an unawareness of the subject. This

resulted in a large number of blank returns which reduced the size of some categories below a desirable level of the original sample.

The preparation of questionnaires seeking an individual's recollection of past events proved to be complicated by the number of issues involved and the difficulty of phrasing questions that were at once both brief and clear. Two results evidenced by the returns are worth noting.

- Answers were internally inconsistent or respondents failed in large numbers to answer all questions.
- Individuals selected in one category qualified themselves in another; e.g. a physician reporting himself as a parent of a hyperkinetic child; laymen who happened to be teachers.

The crossing between categories tends to skew some results but there is no way to prevent this from happening.

IV. FINDINGS OF THE SURVEY

General

This section contains an analysis of the questionnaires. The two questionnaires are treated together with various questions and responses examined in relation to the problems which were stated in our research objectives. Additional data from the questionnaires are contained in the tables shown in the attachments to the report. This section treats the survey in terms of the categories or critical populations: Medical Community, Special Educators, Classroom Educators, Leaders, and Laymen (including parents). The section titled CITY PROFILES contains a presentation of questionnaire and interview data organized by city.

Interpretation of the survey results depends on an understanding of the characteristics of the population sampled and of the nature of the sampling method. Three such characteristics are of central importance:

1. The sample was not intended to be representative of the general population, but only of the population concerned with the issue. Knowledge of the syndrome and modes of treatment is so scattered in the general population as to make any survey technique based on purely random sampling economically impractical. The concerned, critical population was identified as including: professionals in medicine whose specialties do not exclude them from pediatric practice, professionals in education at the primary and secondary levels, persons in positions of public leadership who make decisions or influence opinion regarding education and public health, and parents (supplemented by a single group of randomly chosen laymen).

2. The first questionnaire was sent to identified individuals throughout the United States; the second was limited to four cities. The results, therefore, are more indicative of the range of opinion than of the frequency or incidence of opinions reported.

3. A selective mechanism has probably determined whether or not questionnaires were returned. Our belief is that in this survey, persons who were at all aware of the issue were likely to return the questionnaire. The result is that the spectrum of opinion represented is probably quite typical of those who know about hyperkinesis and medication, but it is not statistically effective in measuring how many people have such knowledge. (Table 18 in attachments)

Classification of Returns

Rate of Return

For the first questionnaire, 1410 were mailed, 761 were returned; for the second, 2946 were mailed and 912 were returned. This represents a rate of return of 54% for the first questionnaire and 31% for the second. Both exceed the 25% response rate which is considered high for a mailed questionnaire.[1] The rates of return were not markedly different among the professional categories in the first questionnaire nor among the cities in the second, except for city 4 in which the rate of return was roughly twice that of the other three. Laymen were consistently lowest in the first questionnaire and in cities 1, 2 and 3, a fact which supports the selective mechanism hypothesis. (See Table 1)

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[1]Miller, Delbert C. *Handbook of Research Design and Social Measurement*, 2nd Ed., New York, David McKay, 1969, p. 76 ff.

TABLE 1

Rates of Return

Questionnaire 1

Category	Returned	Sent	% Returned*
Medical Community	271	542	50%
School Level Educators	164	222	74%
Public Officials	207	333	62%
Concerned Laymen	119	313	38%
TOTAL	761	1410	54%

*Percentages rounded to whole number

Questionnaire 2

Category		City 1	City 2	City 3	City 4	Total	%Ret
Medical	RET.	63	59	62	48	232	36%
	SENT	190	200	200	62	652	
Educator, Special	RET.	41	38	30	45	154	38%
	SENT	100	100	100	100	400	
Educator, Classroom	RET.	34	30	28	51	143	36%
	SENT	100	100	100	100	400	
Leader	RET.	16	17	28	45	106	26%
	SENT	100	100	100	100	400	
Impacted Parents	RET.	12	0	0	35	47	67%
	SENT	30	0	0	40	70	
Laymen	RET.	22	26	58	124	230	22%
	SENT	120	240	464	200	1024	
Total	RET.	188	170	206	348	912	31%
	SENT	640	740	964	602	2946	
% Returned		29%	23%	21%	58%	31%	

Knowledge of Hyperkinesis

In questionnaire 2, a prerequisite for completion of the questionnaire was a "Yes" answer to the first question. Question 1 asked: *Do you know about the use of stimulant medication to treat children who hava a condition called "hyperkinesis," "minimal brain dysfunction syndrome," or "hyperactivity"?* Table 2 contains the data for responses to question 1, 2nd questionnaire:

TABLE 2

Respondents Aware of Medication in Management of Hyperkinesis

(By Category)

	Medical	Special Educator	Classroom Educator	Leader	Special Parent	Layman	Random Layman
YES (Aware)	88%	88%	69%	64%	98%	57%	41%
NO (Not Aware)	12%	12%	31%	36%	2%	43%	59%
Respondents	[232]	[154]	[143]	[106]	[47]	[181]	[49]

Knowledge of the *Freedman Report*

Questions 4 and 5, questionnaires 1 and 2 respectively, were identical and designed to elicit responses showing respondents familiarity with the report. Table 3 contains the data for question 4, questionnaire 1 and for question 5, questionnaire 2.

TABLE 3

Respondents' Familiarity with the *Freedman Report*

Have you seen, or do you know about a report (Report of the Conference on The Use of Stimulant Drugs in The Treatment of Behaviorally Disturbed Young School Children) *by a committee of scientists who met early this year with the Office of Child Development, Department of Health, Education, and Welfare, and made recommendations concerning the treatment of child hyperkinesis using stimulant drugs?*

Question 4, Questionnaire 1

RESPONSE	MED	EDUC	ADMIN	LAY	TOTAL
YES, read report	42%	39%	19%	23%	32%
YES, heard about report but have not read it	32%	24%	32%	18%	28%
NO, have not heard about report	26%	37%	49%	59%	40%
Respondents	[256]	[160]	[201]	[116]	[733]

Question 5, Questionnaire 2

	Medical	Special Educator	Classroom Educator	Leader	Special Parent	Layman	Random Layman	Total
YES, read report	22%	7%	2%	11%	4%	2%	0%	9%
YES, heard about report but have not read it	30%	27%	16%	30%	28%	17%	20%	24%
NO, have not heard about report	36%	54%	50%	23%	66%	38%	20%	41%
Blanks	12%	12%	32%	36%	2%	43%	60%	26%
Respondents	[232]	[154]	[143]	[106]	[47]	[181]	[49]	[912]

While not all questions in both questionnaires have direct, exclusive relationships with our research objectives, all research objectives were addressed by questions designed to elicit responses which would result, either directly or indirectly, in conclusions for these objectives.

The discussion which follows states first the research objective to be addressed, the relevant questionnaire and inquiry or inquiries, and the results obtained from which the conclusions are subsequently drawn.

Were the key issues of the problem clearly presented in the report and recognized by the recipients?

Three questions, one designed to answer this inquiry directly and two designed to answer it indirectly, were included in the first questionnaire.

There were 377 (50%) respondents to the first questionnaire who stated that they did recall something in particular which was said in the *Freedman Report*. Of these, 329 (43%) went on to list statements which were remembered as "important points" from the report, of which the following thirteen were those most commonly stated. As an open-ended question, the number of responses can, and does, exceed the number of respondents. (Table 4)

TABLE 4

Questionnaire 1, Questions 5, 5a

Issues Recalled from the *Freedman Report*

	Identity				
	MED	EDUC	ADMIN	LAY	TOTAL
What are the important points you remember about the Freedman Report?					
Endorsement with reservations: need for expert medical supervision understanding nature of treatment; parental approval	45	15	16	9	85
General description of the report	27	11	11	4	53
No evidence of addiction or dependency	12	11	8	3	34
General endorsement of the use of amphetamines; it works	16	8	5	2	31
Caution against misdiagnosis; necessary screening of patients	15	5	6	3	29
Not enough research or qualified physicians, more research needed	10	3	6	1	20
With treatment children can function better	2	7	3	4	16
Reference made to the number of children reportedly helped by treatment	4	7	2	3	16
Incidence of disorders to be helped (includes references to numbers of children)	6	3	4	3	16
There is little known about the cause	5	2	3	1	11
Drugs are not sufficient by themselves	7	2	1	1	11
Short trial periods should be given with careful supervision	5	2	-	-	7
Role of the drug industry; pressures from the drug industry; drug industries should advertize only through medical channels	2	1	-	-	3
Missing information	18	10	8	9	45
Totals	174	87	73	43	377

Questions 2b and 3a of the first questionnaire were designed to determine which issues were foremost in the minds of respondents. While this bears little direct relationship to clarity of issue presentation in the *Freedman Report* and grasp thereof by respondents, the data indicate public and professional awareness of issues generally.

Clarity and grasp of issues as presented in the report could be ascribed to the *Freedman Report* from differences in data recorded for questions 2b and 3a from those who read the report and from those who did not. Since "Yes, heard about report but have not read it" responses could run from minimal awareness of the report's existence to having listened to a professional panel discuss the report, we have eliminated these responses from consideration here. Moreover, distinctions in data are in greater contrast using the two extremes.

In question 2b respondents were asked to list any criticisms they could remember about "drug treatment for hyperkinetic children." Question 3a asked respondents to list any of the criticisms which they felt were justified. Comparison of differences in answers to 2b and 3a by those who had read the report with differences in answers to these two questions by those who had not, indicates that some variable was more successful in convincing readers of the report that criticisms (which are recognized issues on drug treatment) were unjustified. Although hardly conclusive, the comparison does suggest that this variable may have been the *Freedman Report*.

It is of interest that of the fourteen criticisms most commonly listed by respondents who had read the report and by those who had not, two were not mentioned by the *Freedman Report* and two were barely mentioned.

The two criticisms which were unmentioned as issues in the report (*Artificial control; doping children into submission; unwarranted control of behavior; substitution of drugs for patience* and *focus on symptoms rather than cause; doesn't get to basic problem; used as a crutch when environmental changes are really necessary; use of drugs masks other problems; out of ignorance*) were ranked 5th and 6th respectively in the number of times each was mentioned as a criticism remembered by respondent; and 6th and 4th respectively for the number of times each was mentioned as a justified criticism.

Those criticisms barely mentioned in the report (*Critical on use of drugs on children---very adamant* and *used to control racial minority groups)* were ranked together as 12th most commonly mentioned criticisms of which respondents were aware, and 12th and 13th respectively for the number of times each was mentioned as a criticism which respondent felt was justified.

Table 5 lists the fourteen most commonly stated criticisms (2b) and the number of times each criticism was considered justified (3a). As both these questions were open-ended, the number of responses is greater than the number of respondents.

TABLE 5

Questionnaire 1, Questicns 2b and 3a

Criticisms Cited by Respondents

	2b Criticisms		3a Justified	
	% Read†	% Not Read	% Read	% Not Read
Misuse, overuse, indiscriminate use	30%	16%	13%	5%
Danger of addiction; dependency	27%	15%	3%	2%
Undesired side effects, unknown effects	18%	9%	3%	2%
Inadequate diagnosis; supervision; follow-up	18%	10%	12%	6%
Unwarranted control of child behavior	17%	9%	5%	2%
Focus on symptoms rather than cause	13%	4%	6%	2%
Insufficient research, especially long-term	7%	3%	6%	2%
Dispensing of drugs by non-physicians	7%	1%	2%	1%
Drug culture hazards	4%	2%	*	1%
Alternate modes of treatment unexplored	6%	1%	3%	1%
Parents pressured; misled	4%	2%	1%	1%
Rejection of drugs for children	3%	2%	*	1%
Used to control minority groups	4%	1%	*	*
Unauthorized use by other children	*	*	*	*
Number of Respondents	[235]	[293]	[235]	[293]

*Less than 0.5% (Percentages rounded to nearest whole number)

†% = $\frac{\text{No. of responses}}{\text{No. Respondents}}$

Did the report lead to a change in the prescription of drugs for behaviorally disturbed young school children?

No significant number of physicians reported that they themselves had changed, or that they knew of a change, in the prescribing of drugs for behaviorally disturbed school children.

The following three questions were designed to determine a change in prescription of drugs for children in light of new information contained in the *Freedman Report:*

Questionnaire 1, Question 7

As a result of this new information, did you or your organization do anything specific about treatment of child hyperkinesis? If so, what?

Of 151 physicians who responded to question 7, only 23 stated that they had changed their treatment of hyperkinesis in any way. Of these 23 who did change their treatment, 21 indicated that the changes made were completed before the *Freedman Report*. None indicated whether any changes made were pro- or antidrug use, indeed, there was no indication that changes in treatment involved drug use. (See also Table 14)

Questionnaire 1, Question 8

As a result of this new information did any other organization in your community do anything specific about the treatment of child hyperkinesis?

Seventy-one of 77 physicians who answered question 8 stated that no changes had occurred in their communities because of new information contained in the *Freedman Report*. Of the 6 respondents who answered that changes had

taken place, one indicated that such changes were in the area of drug prescription, while 5 indicated that such changes were more in the socio-educational sector, i.e., educational clinics for parents, speakers at women's organizations, etc.

Questionnaire 2, Question 7b

PHYSICIANS ONLY
Did it (the Freedman Report*) change your practice of medicine in any way? Please explain.*

Of 121 physicians who indicated that they had read the *Freedman Report*, only 12 stated that it had resulted in a change in their practice of medicine in any way. Of these 12, only one indicated that he had "learned that properly used medication can be of great benefit."

It seems apparent from the data presented above that, first, few recall having made changes with regard to prescription of drugs for behaviorally disturbed young school children; and, second, where changes have taken place only a negligible number may be regarded as having stemmed from the *Freedman Report*.

Who was the most responsible for any change?

We had expected from the intensity of the public debate reflected in the newspapers and other public media that two assumptions would be true. First, that our populations would confuse the non-scientific issues with the scientific issues; and, second, that there would be a clear and

probably frequent expression of opposition to the use of "drugs" with regard to children. Both these assumptions, however, proved false.

Only three people of 528 responding to question 3a of the first questionnaire altogether opposed the use of drugs on children. Of these, one had read the *Freedman Report*, two had not.

Table 7, representing data for question 8, questionnaire 2, shows a much unexpected public awareness, and, more surprising still, an apparent acceptance of medication.

This was further tested by the use of a second question (10a) in the second questionnaire which was substantially the same as question 8, with however, the word "drugs" substituted for "medication." The results were as follows:

TABLE 6

Questionnaire 2, Question 10a

Stimulant drugs are often a proper treatment for hyperkinetic children. Answer "YES" if your agree, and "no" if you do not agree.

	Medical	Special Educator	Classroom Educator	Leader	Special Parent	Layman	Random Layman
YES	78%	72%	58%	48%	94%	44%	33%
NO	6%	10%	9%	13%	*	11%	8%
Missing Information	4%	6%	1%	4%	4%	3%	*
Blanks	12%	12%	31%	36%	2%	43%	59%

TABLE 7

Survey 2, Question 8

Opinions about the Use of Medication by Professional Identity

	Identity							
	Medical	Special Educator	Classroom Educator	Leader	Special Parent	Layman	Random Laymen	Total
Medication is:								
Usually wrong	2%	1%	2%	7%	2%	7%	4%	4%
Right used carefully	81	83	65	55	92	48	35	67
Usually right	4	1	1	2	4	1	2	2
Missing information	1	2	1	1	-	2	-	1
Blank questionnaires	12	12	31	36	2	42	59	26
Total number of persons	[232]	[154]	[143]	[106]	[47]	[181]	]49]	[912]

For details of data for question 10, second questionnaire, see Tables 23 and 24.

"YES" answers to question 10a correspond to a choice of the second or third alternatives to question 8, and "No" answers correspond to a choice of the first alternative in question 8.

There is no significant difference shown by the data. The difference between those who accepted "medication" and those who rejected "drugs" for young school children is only 119.

In this regard, the populations tested were in substantial agreement with the *Freedman Report*. There was, therefore, not much change in opinion but rather a lack of difference in opinion. It is impossible to determine who is responsible for a possible change in public opinion when that change fails to materialize.

Is there a desire for more information among the various populations?

The question of public i ormation and the need for conveying valid, scientific knowledge is an important factor in any public health program. When non-medical issues have beome linked with a problem such as hyperkinesis, misconceptions must be overcome in addition to disseminating what is accepted scientific knowledge. There is a fundamental difference between a need for information and a desire to acquire it. In this instance, we were seeking to determine whether there was a recognition among the various populations

of the complex issues surrounding the treatment of hyperkinesis and an expressed wish to become better informed.

Data about a desire for more information on the part of the populations studied were collected in several ways:

1. In response to the question: *Can you see any mistakes which have been made in your community in handling the treatment of hyperkinesis, or the issues which surround it?*, there were 417 comments. Of these, 136 (32%), which was the largest single complaint, cited the poor public information program. This retrospective question in the second questionnaire (Question 14) elicited comments which generally reflected events of the previous year. The confusion created by the revelation that *stimulant* drugs were being used, coupled with a growing public concern about the drug problem generally, probably could not have averted altogether. But the time of greatest need for expert opinion was perhaps six months earlier than the *Freedman Report*. (See Table 28)

2. Questionnaire 2, Question 12: *Has there been any disagreement or strong objection to the use of medication for hyperkinetic children in this city? Explain.* The number of comments describing disagreement or objection totalled 376; 93 (25%) were critical of media communication for having incorrect or faulty information. (See Table 27)

Another opportunity to comment on the information problem was offered in the second questionnaire at question 15, which asked: *Have you any criticisms of the Freedman Report* (Report of the Conference on The Use of Stimulant Drugs in The Treatment of Behaviorally Disturbed Young School Children)?

Very few respondents offered any specific criticisms. The suggestion that the report should have been more widely publicized was offered by two special educators and one layman. (Table 8)

TABLE 8

Questionnaire 2, Question 15

Assessment of the *Freedman Report*

	Identity						
	Medical	Special Educator	Classroom Educator	Leader	Special Parent	Layman	Random Laymen
Have you any criticisms of the Freedman Report?							
Unresponsive, blank, have not read or not familiar with the report	197	147	142	94	46	178	49
General agreement	27	5	-	8	1	2	1
Criticized							
Yes, unspecified	-	-	-	-	-	1	-
Needed wider publicity	-	2	-	-	-	1	-
Lacked classroom teachers on panel	-	1	-	-	-	-	-
Caused alarm, could be harmful	2	-	1	1	-	-	-
Suggests responsive patients easily identified	1	-	-	-	-	-	-
Omits need for training non-medics	1	-	-	-	-	-	-
Too broad, too vague	2	1	-	3	-	-	-
Inadequate for dealing with parents	2	-	-	-	-	-	-
Omits socioeconomic causes	-	-	-	-	-	1	-

Telephone interviews yielded no particular expression of concern for more information. However, individuals contacted were either professionals actively concerned or civic leaders serving organizations concerned with child welfare, positions in which they would tend to be well informed. One locality did suggest that an in-service training program for classroom teachers would be sponsored if the results of this research suggest that such a program would be beneficial.

The best that can be found in these responses is a realization that poor communication of valid information has been perceived by many respondents. They have also seen this problem as having been a major difficulty in their communities when the issue of drug treatment was before the public. In addition, the requests for copies of the *Freedman Report* (34% of all respondents to the first questionnaire) serves as evidence of a wish to learn more on the part of a substantial portion of the sample.

Which media are most effective for different groups---pediatricians, teachers, parents?

The respondents' recollection of the sources from which they gained information about the treatment of hyperkinesis is largely selective. Only meetings, radio and television are essentially random, where the listener or spectator has or exercises little option. The distribution of sources by population (Questionnaire 1, Question 9) shows that professional journals were the most frequent among medical professionals, school-level educators

and administrators. Newspapers ranked as the most frequent among laymen. Table 9 shows the sources cited by respondents as the most important in response to this question.

In the second questionnaire, two questions dealt with sources of information:

Questionnaire 2, Question 3:

Explain briefly how you learned about the treatment of hyperkinesis.

Questionnaire 2, Question 4:

What one source of information was most important to you in forming your opinion?

Medical professionals again cited professional journals most often (27%) in question 3 and as the most important single source in question 4 (32%). This is the expected response. Meetings and colleagues were cited 68 times and ranked as most important 29 times. (Tables 10 & 11)

Special educators and classroom educators followed a similar pattern which is that established in most disciplines. Laymen and leaders found their information most often through having or knowing a hyperkinetic child, followed by contact with professionals, clinics and guidance centers. These are all direct, personal contacts generated by a need or wish to learn from informed professionals. Newspapers and magazines were the most important for 34 laymen of all types, only 14% of the total in these categories.

It appears that in matters of such importance as a child's welfare, laymen seek their information from professionals and do not attempt to qualify

TABLE 9

Questionnaire 1, Question 9

Most Important Sources of Information about Hyperkinesis

	Identity				
	MED	EDUC	ADMIN	LAY	TOTAL
Freedman Report	47	40	31	23	141
Newspapers	57	51	68	55	231
Professional Journals	199	99	116	28	442
Organization meetings	32	17	22	6	77
Professional meetings	133	55	82	11	281
Colleagues	135	59	83	20	297
Friends	7	10	13	17	47
School	8	17	14	5	44
PTA	2	1	2	-	5
Social worker	6	11	8	1	26
Counselors	4	15	10	3	32
Radio & television	13	11	24	16	64

TABLE 10

Questionnaire 2, Question 3

Sources of Knowledge Concerning Treatment of Hyperkinesis

	Medical	Special Educator	Classroom Educator
Professional literature	90	37	19
Encounter hyperkinetic children in profession	81	56	41
Professional Education and training	48	30	13
Meetings	44	27	11
Colleagues	24	4	7
From medical/psychological practice and clinics	20	12	16
School system	8	9	20
Newspapers	7	9	7
Have or know a hyperkinetic child	3	12	16
Magazines	3	7	7
Pediatrician's Desk Reference and drug company literature	3	-	-
Friend	2	-	-
Television and radio	-	4	2
Don't remember	-	-	-
Investigation by authorities	-	1	-
Freedman Report	-	-	-

TABLE 10

Questionnaire 2, Question 3

Sources of Knowledge Concerning Treatment of Hyperkinesis

	Identity						
	Medical	Special Educator	Classroom Educator	Leader	Special Parent	Layman	Random Laymen
re	90	37	19	19	7	14	1
c children in profession	81	56	41	24	3	9	1
n and training	48	30	13	7	2	4	1
	44	27	11	5	-	6	-
	24	4	7	3	1	-	-
gical practice and clinics	20	12	16	25	26	17	2
	8	9	20	3	10	12	1
	7	9	7	10	2	18	8
inetic child	3	12	16	20	18	58	9
	3	7	7	4	5	18	2
eference and drug company literature	3	-	-	-	-	-	-
	2	-	-	-	-	9	1
	-	4	2	3	1	7	2
	-	-	-	-	-	4	-
orities	-	1	-	-	-	-	-
	-	-	-	-	-	-	-

TABLE 11

Questionnaire 2, Question 4

Source of Information Considered Most Important in Forming Opinion about Treatment

	Medical	Special Educator	Classroom Educator
Professional literature	54	7	7
Encounter hyperkinetic children in profession	53	34	21
Meetings	15	10	4
Colleagues	14	3	3
Professional Education and training	13	12	1
Friend	10	-	-
From medical/psychological practice and clinics	8	15	12
School system	3	10	6
Have or know a hyperkinetic child	2	4	17
Newspapers	2	2	3
Magazines	1	1	2
Freedman Report	1	1	-
Pediatrician's Desk Reference and drug company literature	1	-	-
Television and radio	-	2	-
Investigation by authorities	-	1	-
Don't remember	11	5	6

TABLE 11

Questionnaire 2, Question 4

ion Considered Most Important in Forming Opinion about Treatment of Hyperkinesis

	Identity						
	Medical	Special Educator	Classroom Educator	Leader	Special Parent	Layman	Random Laymen
	54	7	7	5	3	7	-
ildren in profession	53	34	21	12	-	3	1
	15	10	4	6	1	3	-
	14	3	3	1	-	-	-
d training	13	12	1	4	2	1	-
	10	-	-	-	-	7	1
l practice and clinics	8	15	12	21	17	12	3
	3	10	6	2	1	7	-
ic child	2	4	17	4	14	26	7
	2	2	3	2	1	9	4
	1	1	2	1	1	8	-
	1	1	-	-	-	-	-
ence and drug company literature	1	-	-	-	-	-	-
	-	2	-	-	2	-	-
ies	-	1	-	-	-	-	-
	11	5	6	5	1	7	1

themselves to make judgements based on the kinds of literature and media that commonly reach them. This does not conflict with a study of medical professionals and mass media as communications sources for medical information. Practitioners generally looked with disfavor upon the media as unlikely to convey valid scientific information to laymen.[1]

What additional distribution of the report do our findings suggest?

To determine what additional distribution of the *Freedman Report* and, indeed, any future similar reports, was suggested by our initial findings it was first necessary to determine how those who had read or heard about the report became aware of it.

From this data we hoped to determine which modes of communication have been more successful in bringing information like that in the *Freedman Report* into public attention. Based on the assumption that the best means of communication in the past would continue to be the best means of communication in the future, we hoped to show that for any occupational group which the report is intended to reach, that a certain means of communication would be preferable.

However, we were well aware that reliability of statements concerning sources of inf. .tion is subject to cautious interpretation because

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[1]O'Keefe, *supra*, p 8.

respondents to questionnaires may tend to favor the more prestigious sources.

Question 6, questionnaire 2 asked: *If you know about that report, how did it come to your attention?* The data for this question are presented in Table 12. The fact that question 6 was an open-ended question explains why the number of responses exceeds the number of respondents.

It is of interest to note that for non-requested (i.e., not specifically sought out by the reader) forms of information dissemination, newspapers were the most frequently mentioned as sources. Newspapers were also the only source which reached all levels of the populations tested, and, notably, the most frequently mentioned among laymen.

Over-promotion of stimulants and new medications is often cited as a serious issue in the public discussion of hyperkinesis. The *Freedman Report* responded to this by stating that "these medicines should be promoted ethically and *only* though medical channels." [p.6, emphasis theirs]. When given the opportunity, however, only 2 doctors and no others in any other category said that commercial drug company literature had been their source of information.

As we had anticipated, it is apparently possible (from the data available) to choose means of communication and public media for information dissemination so as to determine beforehand with some certainty,

TABLE

Questionnaire 2, Question 6

How the Respondents Learned about the *Freedman Report*

	Identity							
	Medical	Special Educator	Classroom Educator	Leader	Special Parent	Layman	Random Laymen	TOTAL
If you know of the *Freedman Report* how did it come to your attention?								
Friend	-	-	-	-	2	7	-	9
PTA, community organizations	-	-	-	-	5	-	-	5
Family Physician	-	5	-	2	2	2	-	11
Requested information	1	-	-	1	-	1	-	3
Newspapers	11	11	4	7	3	8	9	53
Magazines	2	1	1	2	2	4	-	12
Professional literature and periodicals	12	10	2	6	-	3	1	34
Television & radio	2	5	3	1	-	1	2	14
Report was mailed to me or to my office	27	2	-	4	-	1	-	34
Teacher, school principal, school system, school district office	1	5	3	5	-	-	2	16
Guidance center, mental health clinic	2	1	-	4	2	-	-	9
Discussions with colleagues	20	11	7	5	-	-	-	43
Educational conference, seminar, workshop, convention	2	2	1	1	-	-	-	6
University course	1	-	1	-	-	-	-	2
Commercial pharmaceutical literature	2	-	-	-	-	-	-	2
Medical Association committee	2	-	-	-	-	-	1	3
Vague or unresponsive or blank, can't remember	149	113	126	68	37	154	39	686
TOTAL	234	166	148	106	53	181	54	942*

*Indicates total number of responses, not number of persons

which levels of the population will be most accessible. However, the numbers who are reached, if the survey data are at all representative, are not sufficient to suggest that communication ineffectively taking place. It may be true that the same media could be better employed, but these same media are unlikely to achieve a marked increase in effective communication, either for additional distribution of the *Freedman Report* or future distribution of other reports.

An alternative to seeking direct communication (from source to user) is the use of an intermediary. In this instance, informing practitioners who in turn can provide interpreted information to educators and laymen requires the least amount of background, for the professional is already cognizant of the language of his discipline and its methods.

What was the effect of the Freedman Report?

The first questionnaire contained three questions and the second questionnaire contained one question designed to elicit responses about opinion and actions brought about by the report. While such retrospective statements are necessarily accepted with caution, the questionnaires were constructed in such a way as to lead respondents to place the "event" of the report into context of the time when it appeared.

Those who claimed to have read or to have heard about the *Freedman Report* in either questionnaire were asked:

Questionnaire 1, Question 6:

As a result of this new information, have your opinions and feelings about the treatment of child hyperkinesis changed at all, and in what way?

Relevant results are summarized in the following table:

TABLE 13

Questionnaire 1, Question 6

Changes in Opinion After the *Freedman Report*

	MED	EDUC	ADMIN	LAY	TOTAL
Favorable Change	12	23	9	13	57
Greater Awareness of Problem	1	6	2	2	11
Unfavorable Change	3	3	1	1	8
No Change	110	35	49	15	209
No New Information in Report	16	5	3	1	25
◊Missing Information	129	92	143	87	451
TOTAL	271	164	207	119	761

Respondents who had stated they had read the *Freedman Report* were then asked:

Questionnaire 1, Question 7:

As a result of this new information, did you or your organization do anything specific about treatment of child hyperkinesis?

Relevant results are summarized in the following table:

TABLE 14

Questionnaire 1, Question 7

Changes in Treatment After the *Freedman Report*

	MED	EDUC	ADMIN	LAY	TOTAL
Workshops, staff information including circulation of the report; information given to class	13	13	4	2	32
Report used to convince parents, community, physician	6	6	4	2	18
Sought additional information on the topic	1	-	1	1	3
Set up medical screening process	3	3	1	-	7
Treatment of disorder changed	2	-	1	-	3
Not yet, maybe in the future, plans generally unspecified	3	4	1	2	10
NO	94	34	45	20	193
No, already doing something	21	9	9	4	43
Did not regard as new information	3	-	1	-	4
◊Missing Information	125	95	140	88	448
TOTAL	271	164	207	119	761

Lastly, in the first questionnaire, respondents who had read the *Freedman Report* were asked:

Questionnaire 1, Question 8:

As a result of this new information, did any other organization in your community do anything specific about the treatment of child hyperkinesis?

Of 155 respondents who answered question 8, 137 stated that they were not aware of any other organizations in their communities which had done anything specific about the treatment of hyperkinesis. Of 18 respondents to question 8 who said that a change had taken place, only 2 indicated that any change which had occurred had stemmed from the discussion of hyperkinesis treatment in the *Freedman Report*.

The number of positive changes in opinion among medical and educational professionals was expected to be small. These individuals were nearly all involved with young children and could be expected to have an awareness of current developments.

This was, indeed, the case. In the second questionnaire, of the 200 educators and physicians who stated that they had read the report, only 64 said that it had been "useful in talking to others, including the public." Another 38 said it had been of no help, and 98 left the information blank.

Question 7b, a question directed only to physicians, asked if the report had resulted in a change in medical practice in any way. Question 7c, directed only to educators, asked if the report had resulted in a change in teaching methods or attitdues with regard to hyperkinetic children. Data for Questions 7a, 7b and 7c are presented in Table 15.

TABLE 15

Questionnaire 2, Question 7

Reported Usefulness of the *Freedman Report* by Professional Respondents

	Medical	Educator	Medical & Educator
Did it change your practice of medicine in any way?			
Yes	4		
No change	65		
Reassurance, greater awareness*	7		
Do not treat children (make referrals)	3		
Missing information	41		
Total number of persons	121		
Did it change your attitude or methods of teaching, suspected hyperkinetic children?			
Yes		6	
Not at this teaching level		15	
Reassurance, greater awareness, acceptance*		24	
Missing information		34	
Total number of persons		79	
Has it been useful to you in talking to others, including the public?			
Yes			64
No			38
Missing information			98
Total number of persons			200

*More confident and discriminating in diagnosing, learned that properly used medication can be of great benefit, more aware of a problem

**Thinking followed report--agreed more insight in pinpointing or spotting a suspected hyperkinetic child, no change--just confirmation of my own attitude or prior opinion, have learned not to accept medication as a substitute for needed teaching reforms, much more understanding of the situation, greater tolerance of deviant behavior

Perceptions of Hyperkinesis and Issues Involved in its Treatment

The utility of the findings which stem from this survey is derived not merely from the specific features described above. It is also necessary to ask what else has been learned or what may be postulated as information that can be used in the future consideration of hyperkinesis, or, perhaps, of other questions.

Some of the questions that bear on this discussion are:

To what degree was hyperkinesis perceived as a learning defect?

How many saw it as an externally caused syndrome?

Respondents were asked to give their opinion on the nature of hyperkinesis (Questionnaire 2, Question 2). Answers were classified as shown in Table 16. The answer that hyperkinesis is not really an abnormality includes the opinion that it is a manifestation of "a defect in teaching or the education system;" "a defect in the social system" and "labeling is a failure in semantic definition." These replies constitute the perceptions of individuals in every category.

A lack of well-developed and broad-based evidence to the contrary disqualifies these as misconceptions. It does, instead, demonstrate that professionals as well as laymen are not in agreement about the nature and causes of hyperkinesis. So long as this holds true, public perceptions will differ, sometimes intensely as shown in the events of late 1970. The proportion of those who do not regard hyperkinesis as a learning defect was

TABLE 16

Questionnaire 2, Question 2

Opinions about the Nature of Hyperkinesis by Professional Identity

	Identity						
	Medical	Educator	Leader	Special Parent	Layman	Random Laymen	Total
Hyperkinesis is:							
Not an abnormality	15%	9%	14%	8%	9%	6%	11%
A learning disability	67	66	46	77	46	33	59
Missing information	12	21	36	2	42	59	5
Blank questionnaires	7	4	4	13	2	2	26
Total number of persons	[232]	[297]	[106]	[47]	[181]	[49]	[912]

greatest among the "leader" category which includes persons in official positions affecting local policies and whose roles tend to make them able to influence the opinions of others.

It is also clear that a strong majority of respondents (84%) perceived hyperkinesis as a learning defect (Questionnaire 2, Question 2). These replies included a finer definition of the learning defect as being essentially (1)medical, (2) behavioral, (3) both medical and behavioral, or (4) unestablished. While these views ascribe the syndrome to an internal defect (within the child) the conflicting professional opinions of hyperkinesis as a medical or psychological problem are reflected in all categories. The difference, which can clearly affect the modality of treatment is still another consequence of professional uncertainty--an anomaly only until one view is proven or further research makes either tenable when applied to individual cases.

So long as these perceptions persist, and they are not to be wholly overcome by the work of science, this malady and others like it will risk becoming linked with sociological rather than medical issues.

Several questions were included in the second questionnaire to elicit a range of opinion of the issues raised publicly and treated in the *Freedman Report*. Responses were expected to show some comparisons of the impact of scientific communication (the *Freedman Report* and comparable reporting) and of competing communications. Many of the mass media reports stressed abuses of drug programs and suggested that such treatment was used merely to control or suppress children and as a substitute for "improved" schools.

Two issues from the *Freedman Report* are also involved: (1) the association between public anxiety about drug abuse and addiction and the use of stimulant drugs for treatment of child hyperkinesis; and, (2) the principal issue of the *Freedman Report*--the assessment of drug treatment as safe in proper circumstances, as against respondents' expression of opposition to the use of drugs for children.

These responses cannot be regarded as representing opinion except in the cities sampled. However, cities 1, 2 and 3 were areas of active debate about the use of stimulant drugs. Here the unknown bias of non-response becomes important. If no response reflected hostility to what might seem to be a project seeking justification for drug treatment, then the data collected would be misleading.

The data were derived from the question which asked opinions about interpretations of hyperkinesis including some medical, behavioral and environmental explanations. Table 17 shows that in every category there were some respondents who view the condition as a manifestation of other societal problems--poor teaching, a desire to suppress or control, or the survival of minorities. The distribution of answers to question 9 reflects the uncertainty about original causes clearly acknowledged in the *Freedman Report*.

The relation between public conern about drugs as a national problem and opinions on drugs for children can only be conjectured. But any strong opposition to drug treatment is an indicator of a public view, whether

TABLE 17

Questionnaire 2, Question 9

Impressions of Syndrome, by Professional Identity of Respondents

Sources		Identity						
		Medical	Special Educator	Classroom Educator	Leader	Special Parent	Layman	Random Laymen
Cause if often organic	YES	3%	3%	4%	4%	2%	4%	4%
	NO	74	80	54	46	83	46	26
	◊	12	6	10	14	13	8	10
	BLANK	12	12	31	36	2	43	59
Cause is often behavioral	YES	6	7	6	6	6	7	4
	NO	54	50	45	34	38	24	31
	◊	28	31	18	24	53	26	6
	BLANK	12	12	31	36	2	43	59
Cause is often social	YES	7	8	8	6	2	7	6
	NO	30	31	22	27	13	14	14
	◊	51	49	38	31	83	36	20
	BLANK	12	12	31	36	2	43	59
Cause is often poor schools	YES	6	5	4	1	-	4	8
	NO	10	8	7	16	6	6	2
	◊	72	75	57	47	92	47	31
	BLANK	12	12	31	36	2	43	59
Term means child is normal but active	YES	4	5	6	2	2	5	2
	NO	18	14	18	20	26	17	18
	◊	66	69	46	42	70	35	20
	BLANK	12	12	31	36	2	43	59
Term means poor teaching	YES	5	4	3	1	-	4	6
	NO	8	7	4	15	2	8	2
	◊	76	77	61	48	96	45	33
	BLANK	12	12	31	36	2	43	59
Term is used in suppressing children	YES	5	10	4	1	4	6	6
	NO	8	8	6	12	4	8	8
	◊	75	70	59	51	89	44	26
	BLANK	12	12	31	36	2	43	59
Trait may be a desirable adaptation in minorities	YES	5	10	6	5	6	8	8
	NO	4	8	10	10	6	2	6
	◊	79	70	52	49	85	47	26
	BLANK	12	12	31	36	2	43	59

◊ - missing information

professional or lay, which must be taken into account when federal programs are concerned. A clearly substantial number of drug opponents would suggest a need for a program of public information. Returns in this study show that the acceptance or rejection of drug treatment was recorded in responses to the second questionnaire, questions 8 and 10. Many in all categories failed to answer these questions, indicating an unwillingness to assume a position, probably from a realization of inadequate knowledge. The numbers who responded "medication is usually wrong," 32 vs. 614 who regarded it as proper when carefully used are fewer than those who rejected stimulant drugs as a proper treatment, 80 vs. 563.

V. PROFILES OF THE FOUR CITIES

This section contains a profile of each city studied in the survey. Specific findings relating to each city accompany the descriptive profiles. Although the focus of the study is on the categories which reflect the communities of interest, the four cities are not without interest. Individual comment and opinion can be regarded as illustrative of local circumstances, while the questionnaire data is more appropriately examined within the context of a professional or lay category. Numbered notes to the text refer to conversations with individuals at the various cities or to correspondence between the researchers and physicians, administrators, public school officials and community leaders.

The profiles indicate clearly the sensitivity which characterizes the subject of hyperkinesis and its treatment. The same reaction could be expected whenever the circumstances involve young children, public schools and conflicting views. The possibility of sudden and vigorous public criticism is inherent in this complicated mix of sensitive issues; it must be regarded as a major concern in any programs, however sponsored, which attempt to deal with hyperkinetic school children.

It is important to emphasize that to a large extent this research has dealt with past events, not documented, not measurable and not subject to experimental verification. The methods are more like those of the historian seeking to reconstruct events in the minds of his subjects and then asking their interpretation. The tests of statistical significance are ill-suited

to quantify the effects of the *Freedman Report* for several reasons: the effect is dynamic in the sense that it is a continuing rather than one time impact; it depends on the persons and the intensity of their opinions as well as non-measurable interplay with adverse criticism of drug treatment.

There are two distinct professional communities concerned. The first is composed of physicians, strongly representative of pediatricians, with lesser numbers of neurologists and psychiatrists. This is the domain of research and of treatment, and in consequence, the source of scientific literature. Our contacts with individuals active in the study of hyperkinesis and the body of cited journal literature indicate that communication exists among a central group and that this communication has increased since the availability of Ritalin.

The second group of professionals are the educators and their ancillary services, school nurses, guidance counselors, school psychologists. These individuals know the hyperkinetic child from experience in the classroom and referral. Here too, there has been a growth in consciousness of the problem. There is not, however, the 'invisible college' of special interest which serves among the medical profession to communicate improved understanding and effects of treatment. The information flow is from the medical professionals accompanied by some local communication, particularly in workshops and similar service-connected activities.

Profile - City 1

City 1 is a suburb within a western metropolitan area, served by two school districts both of which were included in the professional and parent samples. The population consists largely of working, business and professional families of low to moderate income. Superior medical and health service facilites exist, mostly private; they include a nationally known university hospital and a constellation of other hospitals and clinics, two of which have been the site of important research in pediatric neurology. The school districs have an adequate tax base, and draw for talent and consultive service on several teacher training institutions which are in the immediate area. Student population in public schools is 84% white, 15% Mexican-American and less than 1% black.

City 1 was selected for study after following up questionnaires returned from the preliminary survey which indicated that controversy over treatments existed in the metropolitan area concerned. Pediatricians, public officials and educators were contacted, and the suburb was selected on the basis of the clear perception of public controversy by the persons interviewed, and because of the willingness of local professionals to assist.

That cooperation was in fact given but public officials were apprehensive, as they were in three of the four cities surveyed. A pattern which was to become familiar emerged: when first contacted, both superintendents concerned expressed their interest and willingness to support. When reached by telephone the first one contacted was cordial, volunteered substantial information and

opinion and said that local controversy has subsided since one particular reporter had left the staff of a local newspaper (described later as Newspaper B). He agreed to assist the research;[253*] four days later he wrote saying "... it is our feeling that participation in the survey would only create additional problems for the District ... I must decline your request."[601]

Other contacts followed a similar pattern. Initial enthusiasm faded when the person concerned had time to talk to colleagues or to think about the possibility that they would become involved in controversy as a result of the research.[371, 475, 479, 482] One major subsample, promised through a PTA organization, was lost after weeks of enthusiastic support when a PTA council met and decided that they could not distribute questionnaires because of difficulties they had had at one of the schools and of the way the newspapers had 'misrepresented' the issue. The questionnaire, they felt, might embarrass the schools.

Other organizations, less vulnerable to public pressure, continued to give enthusiastic assistance, including the teachers' associations,[473] the League of Women Voters,[485] physicians[469 *et seq*] and parent organizations working for disabled children.[383, 475]

Almost without exception, parents and professionals contacted explained local controversy as having been generated by news coverage. These comments were not solicited and were often succinct.

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*Numbers refer to contacts with individuals. Working memoranda were prepared for the research file.

The major paper (Newspaper A) is a member of a newspaper chain which operates its own wire service. Coverage of hyperkinesis dates from the summer of 1970 when feature status was given to reports of parent opposition to medication in city 3. As no one seems to recall it, this reporting appears to have generated little suburban interest at the time. Subsequent occasional articles in the Sunday supplement are well remembered and were cited both by interviewees and persons responding to questionnaires.

The city editor of Newspaper A was contacted. He was familiar with the issue and the alleged controversy in city 3 but did not remember how the story was handled; he suggested talking to the medical editor or staff of the Sunday supplement. The city editor seemed cautiously sympathetic toward medication. The editor of the Sunday supplement remembered the issue vaguely but was not sure whether it had been treated in his magazine and had no opinion about the appropriateness of medication.

Newspapers B and C are suburban locals, similar in editorial position, and often using identical materials. Newspaper C was cited only once by a respondent and is not demonstrated to have affected public perceptions. Newspaper B was the most widely identified source.

Newspaper B, which is considered conservative in the community, is a member of a small national chain. It is described locally as "anti-public education." One parent offered that "... we have a paper here that just slants everything they can do against the school district--I'm sorry to say, you know--they're just not with us ... if they can pick up any little thing and play it up to the hilt ...."[365]

From a pediatric neurologist: "Every day I run across a parent who says "I don't want my kid to be a dope addict'." He felt that the idea that addiction is a consequence of medication came from the Sunday supplement to Newspaper A, which had "a big spread about two weeks ago".[188]

A leading university researcher in pediatrics: "One of the problems is (Newspaper A) ..." which is the most important paper in the area. He stated that Newspaper A carried the controversy in city 3 on the front page, but would not cover events which reflect other views, although he tried to call them to the paper's attention.

Educators and physicians frequently felt persecuted by the press even though they might not have been personally attacked. A private pediatrician reports that two nationally known newspapers called him. "... they didn't want the good stuff. They were looking for ammunition."[252]

A director of student services was one of many teachers and parents who felt that the opposition of a local paper (Newspaper B) was more crucial. This director felt that parents of hyperkinetic children are rarely opposed to either diagnosis of the syndrome or to medication but a relatively small group of non-parents have focused their opposition consistently and successfully on other subjects such as sex education and special education services in the schools. "... but parents that have these youngsters, they want help."[375]

Media and Coverage

City 1 is served by three suburban newspapers, several T.V. stations and a large metropolitan daily.

That opinion was a common one.[363, 364] Beginning in June 1971 Newspaper B carried a four part series which, although it did not altogether reject diagnosis of the hyperkinetic syndrome or use of medication, it did give the impression that medication was being administered directly by the schools. The series ends with the observation:

> According to the manufacturer of Ritalin, the CIBA Co., the drug can cause vomitting, agitation, tremors, hyperreflexia, muscle twitching, convulsions, (which can be followed by coma), euphoria, confusion, hallucinations, deleria, sweating, flushing, headache, hyperpyrexia, tachycardia, palpitations, cardia arhythmia, hypertension, mydriaxis and dryness of the mucous membranes.
>
> "It all depends on the price we want to pay," says (a local) physician, "and I a not talking about money."
>
> With the long term use of behavioral modification drugs still shrouded in mystery, the price could be very high, indeed.

Newspaper D is a tabloid, the editorial position of which cannot readily be identified. The editor stated: "We're following the conservative category ... and some of these doctors are highly conservative in everything, ... but they've really jumped on us ... over this hyperkinetic deal, as far as drugs are concerned. Now it turns out, after conversation, that we're not in disagreement at all."[380] It is recognized--the fact that there are certain children who are aided greatly. However, he had found out that school nurses "were practically prescribing the drug." Were there specific instances, we asked? He could not recall them, but had given some to the school board.

Findings of the Questionnaire - City 1

Returns from the final questionnaire confirm the impression that concerned persons in City 1 approve the use of medication, in spite of their belief that there has been some mispractice in its use.

Of 640 questionnaires mailed, 188 (29%) were returned, the bulk of these by professionals. Most respondents (82%) claimed to be aware of the use of medication to treat hyperkinesis. This figure cannot be projected to the rest of the sample since those who did not reply are presumably likely to be those who did not recognize the terms or who had no interest in the issue. Table 19 applies.

Of those responding, the overwhelming majority regards hyperkinesis as an abnormal condition which may properly be treated with medication. In response to question 2, 127 persons defined hyperkinesis as a learning defect, and only 19 as being a semantic construct or a condition which is socially caused (Table 20). Regardless of its nature or cause, medication was approved by most. Responding to question 8, only 4 of the 151 respondents replied that the use of medication is 'usually wrong'. Examination of the four questionnaires concerned reveals that in two cases the respondent approves medication but doubts that it is appropriate in a majority of cases. Two other respondents, one physician and one lay parent, were unequivocally opposed to medication.

On the other hand, respondents did not accept medication as a panacea. Only 5 of 151 respondents thought medication was 'usually right;' the modal response (142 replies) was 'medication is proper when carefully used.'

In answer to question 9 (Table 22) 75% thought the cause of hyperkinesis to be 'often organic.' Many of these same respondents believed other causes were possible: 49% thought it to be 'often behavioral,' and 23% 'often social.' 7% agreed that 'the term is used to suppress children'--a response selected by most physicians.

Question 10 (Table 23) elicited opinions in regard to the use of medication and 10A specifically tested the hypothesis that use of the words 'stimulant drug' rather than 'medication' would stimulate a more negative response. In fact 9 more persons responded negatively to question 10A (which used the word stimulant) than to question 8 (which used the word medication). The difference is not statistically significant but occurs consistently in all four cities surveyed. No significant number of persons (fewer than 7%) thought that it is 'never proper to tamper with the minds of children,' that medication 'leads to addiction,' that hyperkinetics should be 'appreciated as they are,' or that 'medication only masks the symptoms.'

This suggests a low level of alarm and a rejection of the issues raised by the more outspoken adversaries of medication. It is a little surprising then, to discover that many respondents believe professionals have misused medication. Question 11 (Table 25) sought opinion regarding possible poor professional practice. Of those replying, 12% believed that medication had been prescribed by persons who were not physicians. 42% (including 63% of physicians themselves) believed that diagnosis had been made by physicians who were not qualified; 20% believed that the schools exerted improper pressure on

physicians or parents to secure prescription of drugs. On the other hand, only 4% (5 respondents) believed that drugs had been used to control minority students and only one respondent believed that drugs had been used to limit the performance of white students. This last statistic was of special interest since one position taken by opponents of medication in the area had been that medication was a plot to limit the performance of whites.

Question 12 asked what controversy had taken place and invited comment on objections which had been raised to medication. Not all respondents commented and some made more than one observation. Statistics in Table represent numbers of comments rather than numbers of persons. 32% of comments were to the effect that there had been no controversy, no serious controversy, or an equivalent statement. 68% of comments identified or described controversy. Of these, (98 comments) 27 simply noted that controversy had occurred without revealing any respondent bias. 12 implied that the respondent was opposed to, or had reservations about, medication. 4 revealed bias in favor of medication. 41 identified controversy as being caused by media or public communications and 14 were 'yes' responses of miscellaneous meaning.

Question 14 (Table 28) asked for comments on mistakes which had been made by the community in managing hyperkinesis. The statistics again represent numbers of comments rather than numbers of people. There were 35 'no' responses, and 118 comments suggesting mistakes of the past. Of these believed mistakes, 21 were not classifiable. 11 (10%) were allegations of poor professional practice and none condemned the use of medication. 24 (20%) suggested a slower or more conservative approach should have existed. 38 (32%), the largest number, believed that public information had been inadequate or misleading.

Profile - City 2

City 2 is a socio-economically depressed area within an east coast metropolitan city, an area defined by two adjacent school districts. The population has for the last 20 years been in transition from a mixed urban middle class and second-generation white working class to a mix which is now about 40% Spanish-speaking (mostly Puerto-Rican), 30% English-speaking black and 30% white. Medical and health facilities are adequate, mostly public or otherwise outside-funded, but heavily burdened by an expanding population and public need. Several facilities are associated with medical schools and there are a multitude of small experimental or demonstration health projects funded by USOEO. The school districs are administratively independent, but not independently funded, drawing largely on outside sources of tax money. Expenditure per pupil is nevertheless above the national mean.

City 2 was selected for study because it was identifiable from the literature as a troubled school system and was mentioned by opponents of medication as a place in which medication had been abused. Public officials and staffs of the major clinics were contacted and they confirmed that there has been an outcry against diagnosis of hyperkinesis and the prescription of medication. All school districts in the metropolitan area were contacted and two adjacent districts were chosen in which controversy was most clearly identifiable.

In talking to the district superintendents, a pattern emerged which was repeated persistently during the following months. Those officials were highly apprehensive; when hyperkinesis or an equivalent term was mentioned they at

first did not admit knowledge of the use of medication. Later they acknowledged knowing about it, but not having heard of any protest about it. Finally, when confidence was established, they were highly conscious of controversy and were voluble in describing it. Many at last seemed happy to have an outside and presumably neutral listener upon whom they could unburden their troubles. None wanted to be a party to the research because they feared that it would trigger further controversy. One district, whose superintendent finally gave substantial unofficial help, was typical: first questioned, the superintendent declined to recognize the issue. After some explanation of our interest, he relented, saying, "Well, I know how controversial it has been in this district! This district goes wild when you talk about it. They equate it with the child being emotionally disturbed, and they say the psychologists are making drug addicts out of their children...."[274]

The counterpart of this superintendent in the adjacent district was less willing to discuss the issue. Both he and the assistant superintendent refused to talk and asked for a letter.[271] Later he reluctantly consented to assist,[393] then withdrew, saying that a survey would only alienate parts of his district which were already aroused about another kind of local educational issue.[403] By this time the researchers were committed beyond recall. The superintendent repeatedly protested the use of his district.[462 *et seq*]

From these and other contacts a picture emerges of school districts in conflict with the populations they serve. The divergence of confidence has been developing for twenty years or more as the ethnic composition of the districts shifted steadily toward poor blacks and later to Spanish speaking Puerto-Rican

and Cuban minorities. The communities served include at least four separate ethnic groups, each of which is isolated, effectively non-literate and out of communication with the outer world.

The schools find themselves in a hostile environment. One superintendent recently quit after being physically threatened and his successor works in an office which is fitted with an alarm system and has the windows covered with steel plates. Some schools are, frankly, in anarchy and in all there is a high level of overt violence. Students do not accept the educational goals of the staff as valid.

Parents, especially those of children doing poorly in school, recognize the schools as one highly visible facet of a threatening environment long perceived as oppressive. They believe that it is the responsibility of the schools to provide a program in which their children will feel at home. While rejecting the teaching of conventional skills these parents demand that their children be prepared to compete effectively.

Administrators tend to agree that the schools are to blame, in the sense that they have made errors and have not been equal to the task which the circumstances define. They are aware of a poor ability to teach those of Spanish background and of inadequate means for assisting those who arrive at school age with cultural resources well adapted to conventional schooling. They are unable to believe in radically redefined educational objectives or to convert students and parents to a belief in conventional skills and values. Resources are not the only problem for even if there were unlimited funds, there would be

no consensus as to how to use them, no proven methods to adopt and no staff train d to apply them. Administrators also believe that, although hyperkinetic children are not diagnosed or treated by the schools, guidance personnel have been less than cautious in suggesting treatment and that abuses of medication have occurred. The medical community is criticized for what is believed to be frequent inadequate follow-up and adjustment of dosage.

In this situation teachers find themselves between administration and community. They are frightened and tend to polarize. Most look on the community as a hostile force but a few elect to identify with the community and to take the position that the administration is repressive, lacks understanding and sets inappropriate learning goals. Regardless of their attitude toward the community, teachers feel that the administration does not support them properly.

In this environment it is an automatic perception for a parent whose child is hyperkinetic to feel that he and his child are being attacked. Observers report three vectors of that perception: that the child is being labeled as defective by those who are his natural enemies, that they are suggesting medication as a means of exerting control over him and that medication contributes to addiction in a conspiracy for genocide.

It is observed that only in this city (city 2) is this perception not traceable to somewhere else and only in this city is it apparently not an idea which is transmitted by public media. Controversy on the point appears to have occurred here two to three years before it did in either of the other cities with controversy studied; it appears to have been a natural perception, in

that any extraordinary event in city 2 could be explained to some extent in terms of adversary relationships with established society. It appears to be communicated almost exclusively be street level communications. Some reflection of that perception appears in the 'underground' and social reformist press by which it is transmitted to the literate public outside the districts under study. In no case, however, did a professional interviewed believe the media to be a cause of controversy. This is in contrast to all other cities studied, where the modal response to the question: "Why does controversy occur?" was overwhelmingly: "Because of poorly informed media reporting."

Members of OEO agencies who were contacted were all aware of controversy; they either doubted the reality of a hyperkinetic syndrome or were opposed to medication. A District Director explained that "... people don't necessarily feel that the problem is with the child .... I would assume this (medication) would be a rather dangerous undertaking, especially with children. Adults suffer from the use of ... Ritalin. They're building up some sort of dependency on the part of the children." Of the schools he said: "... if they have problems, they just don't want to deal with them. And they are not really dealing with what I would consider ... a human point of view."[334]

A coordinator of programs in education offered that: "The parents don't like [medication] because ... they don't feel that they really have to give the kids drugs." The schools are "not really concerned about the problems the children are having and ... in order to shut the child up they give him drugs. Parents don't trust the teachers and they have a good reason. The teachers

don't trust the parents for one thing." She sees no possibility that the drugs are not addictive. If they are not "why are they being taken off the market?"[519]

The director of a neighborhood civic league confused hyperkinesis with intelligence and believed that testing might disprove its reality. She had just been talking to parents about hyperkinesis and said: "... Poor people just don't find it feasible to trust the establishment." She hears much objection to medication: "... some people are not aware that the pill their child is taking is a tranquilizer. When they do become aware of it they resist it. I don't feel ... that when a child is tranquilized he can sit in a classroom and learn ... he is being retarded ... he is not aware." She is confident that the medication is in fact habituating: "If a drug has a tendency to become habit forming, it has a tendency to become habit forming." That is what she hears from people "and, in fact, it's all I hear."[345]

The Medical Community

Members of the medical community contacted were uniformly interested in the project and ready to assist but fearful to the point that it was not possible to reach parents through any clinic in city 2. One doctor described the black community which she served as "up in arms about a lot of things," and especially about relations between black patients and white doctors."[504] Others said much the same thing in declining to assist with the 'special parent' sample.[501, 505] Some noted that popular opposition to medication was great enough that they preferred not to prescribe it when possible.[491, 428] Some

parents had refused to accept or administer medication to their children presumably because of public protest against drug therapy for hyperkinesis.[421]

The Teacher's Union

A bright spot in the local picture was the teacher's union, which gave quick and highly effective assistance to the researchers. The assistance was offered in spite of the good-humored observation that it might cost a fight and some major embarrassment. An unobtrusive description of the project was run in the union newspaper.[427, 499]

Findings of the Questionnaire - City 2

Findings of the second survey did not altogether support the rather alarming conclusions based on anecdotal data as stated above. This is undoubtedly explained in part by the fact that adversary parents may not be highly literate and had been predicted not likely to respond to a questionnaire.[294, 312, 316, 324, 326, 335, 421] Therefore the findings described below can be considered to describe only the professionals in city 2 and are atypical for laymen. Of those responding, most approved the use of medication in spite of a general belief that there have been abuses in its use.

Of 740 questionnaires mailed, 170 were returned or 23%. Most respondents (68%) claimed to be aware of the use of medication to treat hyperkinesis. This figure cannot be projected to the rest of the sample since those who did not reply are presumed likely to be those who did not recognize the terms or who had no interest in the issues. Table 19 applies.

Of those responding, the majority regard hyperkinesis as an abnormal condition which may properly be treated with medication. In response to question 2, 80 persons define hyperkinesis as a learning defect, while 24 regarded it as a semantic construct or a condition which is socially caused. (Table 20). Laymen were more prone to define the condition as an abnormality than were physicians. Regardless of its nature or cause, medication was approved by most respondents. Responding to question 8, only 5 of 114 who responded replied that the use of medication is 'usually wrong.'

On the other hand, respondents did not accept medication as a panacea. Only 2 of the respondents thought medication was 'usually right.' The modal response of 107 replies was that 'medication is proper when carefully used.

In answer to question 9 (Table 22) 53% thought the cause to be 'often organic'. Many of the same respondents believed other causes to be possible: 42% thought it was 'often behavioral,' and 31% 'often social.' A few believed that 'the cause is often poor schools'; that 'the term means poor teaching 8%; and the term 'is used to suppress children' 7%. It is interesting that at least 5 of the respondents who made this reply were persons who approved medication when 'carefully used'.

Question 10 (Table 23) again elicited opinions in regard to the use of medication and 10A tested the hypothesis that the use of the words 'stimulant drug' rather than 'medication' would stimulate a more negative response. In fact, within the small samples of leaders and laymen, 18% responded 'No'

to 'Stimulant drugs are often proper treatment,' whereas only 3 out of 22 thought that "Medication is usually wrong'. The difference is greater than similar differences which occurred in other cities but would be more significant were the composition of the sample specifically known. The leader sample contained approximately 20% persons who were community leaders in USOEO advocate agencies. It is concluded that among some portion of the persons sampled, semantic differences in describing medication are important. Table 24 reflects this data for a differently chosen subsample.

There were also scattered responses to question 10 (less than 12%) agreeing that it is 'never proper to tamper with the minds of children,' that 'medication leads to drug addiction' and 'medication only masks the symptoms'.

These responses suggest rejection of the issues raised by the more outspoken adversaries of medication but they do indicate a measure of scattered public alarm. In contrast, a large proportion of the same respondents believed that professionals had misused medication. Question 11 (Table 25) asked for opinions regarding possible poor professional practice. Of those replying, 33% believed that medication had been prescribed by persons who were not physicians, 56% believed that diagnosis had been made by physicians who were not qualified and 48% believed that the schools had exerted improper pressure on physicians or parents to have drugs prescribed. In each category the response of physicians was essentially similar to that of others. The response to these questions was substantially more critical than in other cities surveyed.

In city 2 a larger proportion of respondents (12%) than in other cities believed that drugs had been used to control minority students, but none of the respondents agreed that drugs had been used to limit the performance of superior students (Table 25).

Question 12 asked what controversy had taken place and invited comments on objections which had been raised to medication. Not all respondents chose to comment, and some who did made more than one observation. Statistics in Table 27 reflect the number of comments rather than numbers of persons. In city 2, 33% (or 31 responses) of comments were to the effect that there had been no serious controversy, or an equivalent statement; 67% described controversy which was seen to have occurred. Of these 95 comments, 18 noted simply that controversy had occurred without revealing any personal opinion. Reservations about, or opposition to, the use of medication was implied by 19 respondents. Support for medication was implied by 7 respondents and criticism of the role of media by only 4, a statistic sharply in contrast to those from other cities and consistent with analysis of anecdotal reports.

Question 14 (Table 28) asked for comments on mistakes made by the community in dealing with child hyperkinesis. Again, the statistics represent numbers of comments rather than number of people. There were 19 'No' responses to the question 'Can you see any mistakes which have been made in your community ...?' and 71 responses which described specific perceived mistakes of the past. Of these, 10 concerned professional practice and none were to the effect that medication should not have been used. There were 9 responses which suggested that a slower or more conservative approach should have been

taken and 17 which suggested a more aggressive program should have existed. The largest number, 24, were to the effect that public information had not been adequate. 11 responses were not classifiable.

Profile - City 3

City three is a midwestern city with a population of approximately 500,000 which, with a contiguous suburb, forms the area studied. Each area is served by an independent school district; total student population is about 65,000. The urban area has a population mix closely representative of the national average with under 15% black minority population most of whom live in the city. The area has light industry, performs regional support services for a large agricultural region and has substantial numbers of people working in state and federal services.

Medical resources are good for a midwestern city of moderate size and are supported by two major universities and their medical schools. The school systems are progressive and, aside from the issues being studied here, economically healthy and relatively free of the ills which have troubled large urban schools nationally. They have had a vigorous special education program conducted in liaison with the state university.

City 3 was selected for study because it figured uniquely in past controversy over the use of medication for hyperactive children and because it was one of four cities identified in following up the initial questionnaire as having such controversy. Local officials and members of the medical profession who were contacted verified that there had been a controversy perceived locally and that some local professionals were interested in the research and willing to assist.

The researchers did in fact receive substantial assistance from both proponents and opponents of medication (with notable exceptions) in spite of the fact that there were frequent expressions of regret from professionals that a forgotten issue might be revived by appearance of the questionnaire.[330, 417, 439] Most professionals contacted were enthusiastic in their assistance and few saw their participation as potentially hazardous to themselves. They tended to discuss local issues more freely than professionals in cities 1 or 2. Two perceptions were encountered; one associated with opponents of medication and one common among professionals and their lay supporters.

Opponents of medication believe that medication is unwise and that the local schools and medical communities have in the past participated in what amounts to a conspiracy against blacks and children of the poor. The persons responsible for abuses have in part corrected their practices and have succeeded in covering what was done in the past.

> The basic issues never did really get aired here. As a result of past controversy there have been a lot of corrective measures taken, but here again that's been in-house cleaning up. What we did do by raising the issue was to create an environment which would then allow those in the medical profession to clean up the issue internally. (There is) not so much of a problem as it was a couple of years ago.[440]

The charges which local opponents had made in the past regarding the motives behind medication--such as: that it was intended "to make zombies out of blacks and gullible white people"--were not made during interviews; the focus of opposition seemed to be on the possibility that drugs were

prescribed in the interest of doctors and of the drug industry. Drugs are seen as potentially harmful because of side effects, genetic effects or addiction.

The researchers were able to reach only three or four very vocal spokesmen for the opponent viewpoint. It was not possible for those opponents to identify others because, as they said, "the parents of those kids are so scared that they'd be found out." Opponents of medication volunteered to distribute 100 questionnaires to members of the minority communities and 10 to leaders in those communities. The latter were evaluated as part of the leader sample. 440, 445, 510, 531

Professional spokesmen and their supporters preceived the controversy as one which is almost wholly artificial, the result of conflicting private interests and of national newspaper publicity. A newspaper published a series of reports concerning the use of medication in city 3, a series which proponents of medication believed to be negative, not based on local realities and scientifically unsound. That press account of events in City 3 was picked up by other media and gave credibility to what proponents consider a false local allegation which otherwise would not have been considered significant. Further force was given by the fact that the allegations led to the introduction of bills in the U.S. Congress and to hearings by a committee of the House. 331, 332, 340, 412, 415, 418, 522

Both proponents and opponents of medication view the controversy as having been of brief duration. Several proponents made the observation

that City 3 was the point of origin of a national examination of the issue. and that "(City 3) took the rap". [417] Opponents expressed regret that the issue could not be revived. [445, 340] Many felt that the issue remains a personal one between individuals. [407, 412]

One moderately detached observer summarized that controversy was largely a failure of public information:

> We sat back--the people who were involved . . . medical or educators . . . they hid from it. They said "We'll go ahead and do it, and talk about it later." They felt that informing the public would provoke a reaction and chose not to say anything. And it caught up with them that way. It all amounts to a sound information program in the formative stages . . . rather than after you've started. This is where it backfired. There were kids already on that stuff and . . . the parents themselves were not all that upset. They see the benefits . . . The slam technique got in there ahead of the positive technique . . . and said "We're drugging blacks" . . . and when we said "Here's what we're trying to accomplish" after they said "you're drugging blacks"--it just sounded defensive.
>
> [The local press this respondent remarks] . . . didn't hurt us too bad. [But the national press] . . . took off on it on a very negative standpoint. [The issue] . . . hit hard, and blew quick. [522]

A prominent force in the local controversy was an organization of parents and professionals concerned with handicapped children, which appears to have been the principal vehicle of communication among laymen and teachers and the major source of original stimulus for diagnosis and medication.

Findings of the Questionnaire - City 3

Analysis of the returns from Survey 2, the final mailed questionnaire, supports the picture of the community as considering itself to have undergone a major controversy over the proper management of child hyperkinesis. The controversy is not now active but has left some acrimony and more uncertainty on some points than is seen in other cities. Nevertheless there is a clear concensus that hyperkinesis is an abnormality and that medication is one proper mode of treatment, a mode which is approved in spite of substantial opinion that medication has been improperly used.

Of 964 questionnaires mailed 206 were returned (21%), a lower rate of return than from any of the other cities surveyed (Table 1). That low rate of return may have been partly due to few returns from special educators and classroom teachers. Most respondents (68%) claimed to be aware of the use of medication to treat hyperkinesis.

Of those responding a clear majority regarded hyperkinesis as an abnormal condition which may properly be treated with medication. In response to question 2, 105 persons defined hyperkinesis as a learning disability and 29 defined it as being a semantic construct or a condition which is socially caused (Table 20). Regardless of its nature of cause, medication was approved by most. 12 of 137 persons responding to question 8 replied that the use of medication is "usually wrong". In comparison to other cities in the survey, city 3 shows high levels of uncertainty.

The proportion of persons responding that medication is "usually wrong" was twice that encountered in any other city.

Those who accepted medication apparently did not regard it as a panacea, for only 3 persons thought medication was "usually right". The modal response (121 replies) was "medication is proper when carefully used".

In answer to question 9 (Table 22) 51% thought the cause of hyperkinesis to be "often organic". Many of these same respondents believed other causes were possible. 39% thought it to be "often behavioral" and 24% "often social". Again these responses reflect higher levels of uncertainty than in other cities surveyed, with the occasional exception of city 2. No significantly high number of respondents thought that "the term is used to suppress children" 8%. This response was rarely selected by medical or educational professionals.

Question 10 (Table 23) elicited opinions in regard to the use of medication. 10A tested the hypothesis that use of the words "Stimulant drug" rather than "medication" would provoke a more negative response when, in fact, more persons objected to the statement "stimulant drugs are often a proper treatment" (question 10A) than responded to medication is "usually wrong" (question 8). The difference is not statistically significant but occurs consistently among all cities surveyed (Tables 27 & 23).

Respondents from city 3 showed more uncertainty than those from other cities in responding to other questions concerning medication. There were

12% who responded "yes" to "it is never proper to tamper with the minds of children" and 8% who believed that medication "leads to addiction".

In spite of relatively high levels of expressed alarm, there was a clear majority of respondents who rejected the issues raised by the more outspoken adversaries of medication. It is a little surprising in these circumstances to discover that very many respondents believe professionals have misused medication. Question 11 (Table 25) asked opinions regarding past local professional practice. Of those replying, 15% believed that drugs had been prescribed by persons other than physicians. There were 32% who believed that diagnosis has been made by physicians who were not properly qualified; among physicians themselves, 51% were of that opinion. 88% of non-professionals responding in city 3 believed that "drugs have been used to control minorities:.

Question 12 asked what controversy had taken place and invited comment on objections which had been raised to medication. Not all respondents commented and some made more than one observation. Statistics in Table 16 represent numbers of comments rather than numbers of persons. An overwhelming proportion of the responses (89%) identified or described controversy, confirming the observation from anecdotal data that city 3 was the city with the highest level of perceived controversy. City 2, where the level of controversy was also relatively high, reported at the 69% level; controversy in that city is endemic and is not centered on the issue of hyperkinesis. Of the 130 comments from city 3, 40 simply noted that controversy had occurred without revealing specific opinions of the respondent. Reservations concerning medication, or opposition to medication, was implied

by 25 respondents and another 25 supported medication. Criticism of news media as a cause of controversy was implied by 36 responses and 4 were of miscellaneous import.

Question 14 (Table 28) asked for comments on mistakes which had been made by the community in its approach to child hyperkinesis. The statistics again represent numbers of comments rather than numbers of persons. There were 26 "no" responses, denying that mistakes had been made, and 99 which described specific, perceived mistakes. Of these, 9 identified poor professional practice but only 1 condemned the use of medication. A slower or more conservative approach was suggested by 19 respondents in contrast to 14 who believed that a more aggressive program should have existed. The largest number, 38, were to the effect that public information had been inadequate or misleading.

Profile - City 4

City four is a small industrial city on the edge of the eastern megalopolis in an area where public communications and services are not defined by city lines. It was selected by the researchers for study as a control case because it was known to have an active local program for the treatment of hyperkinetic children, was in many respects analogous to other cities studied and had no apparent history of public controversy; it was regarded as the "no controversy" case. The demographic mix is typical of national norms except that average levels of education are believed to be high.

It is served by above average private and public health facilities, including a small public mental health center for children which provides most of the diagnosis of hyperkinesis for the two school districts concerned. It is sufficiently close to large metropolitan centers not to require such local facilities as medical school or university-based consultants in education. It is the site of nationally published research on child hyperkinesis.

Such ready cooperation was given to the researchers by local schools and medical personnel that little anecdotal data was collected in organizing the survey. Nevertheless, the community was confirmed as having seen no significant outcry against the diagnosis or treatment of hyperkinesis.

The city is served by at least 4 regional newspapers and is within the circulation area of several large metropolitan dailies. Newspaper A, which figured in city profiles 1 and 3, is not normally circulated in City 4.

Findings of the Questionnaire - City 4

Returns from the final questionnaire (Survey 2) confirm the impression that persons in city 4 are not aware of controversy and that they are in general approval of medication. The survey found, nontheless, that levels of public uncertainty about hyperkinesis were not significantly different from the levels in other cities surveyed.

Of 602 questionnaires mailed, 348 were returned (58%), the highest rate of return among the four cities. Most respondents (77%) claimed to be aware of the use of medication to treat hyperkinesis. This figure cannot be projected to the rest of the sample as a measure of public awareness since those who did not reply are presumably likely to be those who did not recognize the terms or who had no interest in the issue. Table 19 applies.

Of those responding, the overwhelming majority regarded hyperkinesis as an abnormal condition which may be properly treated with medication. In response to question number 2, 218 persons defined hyperkinesis as a learning defect and only 35 as a semantic construct or a condition which is socially caused (Table 20). Regardless of its nature of cause, medication was approved by most. Responding to question number 8, only 11 of 269 responding replied that medication is "usually wrong". Examination of the questionnaires reveals that several of the respondents making that reply actually accepted medication, but doubted that it is appropriate in the majority of cases.

On the other hand, respondents did not accept medication as a panacea. Only 10 respondents thought that medication was "usually right"; the modal response (243 replies) was that medication is "proper when carefully used".

Question 10 (Table 23) asked opinions regarding the use of medication and 10A tested the hypothesis that use of the words "stimulant drugs" would provoke a more negative reply than "medication". In fact, 11 more persons responded "no" to the statement that "stimulant drugs are often a proper treatment" (10A) than responded "medication is usually wrong" (8). The difference is not statistically significant but is consistent with the trend elsewhere. Table 21 applies. No significant number of persons thought that it is "never proper to tamper with the minds of children", that medication "leads to addiction", that "hyperkinetics should be appreciated as they are" or that "medication only masks the symptoms". The rates at which those responses were selected were lower than in high-controversy cities 2 and 3 and higher than in city 1.

This suggests a low level of alarm and rejection of the issues raised by the more outspoken opponents of medication. It is a little surprising then, to discover that many respondents believed that professionals in their city had misused medication. Question 11 (Table 25) asked for opinions regarding possible poor professional practice. Of those responding, 11% believed that medication had been prescribed by persons who were not physicians. 18 (including one third of the responding physicians) thought that medication had been prescribed by physicians who were not qualified. 14% believed that the schools have exerted improper pressure on physicians or parents to secure prescription of drugs. The level of confidence which

respondents gave to professional practice would appear to be higher than in any other city studied by a comfortable margin; nevertheless, there are a substantial number of respondents whose approval of medication is given in spite of a conviction that it has been improperly used. Only 2% (4 persons) answered that drugs had been used to control minority students, again, the lowest incidence of that response among cities in the survey.

Question 12 asked what controversy had taken place and invited comment on objections which had been raised to medication. Not all respondents commented and some made more than one observation; as a result statistics in Table 16 represent numbers of comments rather than numbers of people. The majority (139 replies) were to the effect that there had been no controversy or none of significance. That majority (61%) was twice as high a level of favorable comment as occurred in other cities and would seem to confirm the evaluation of city 4 as a low controversy site but not as one in which no controversy has taken place. There were 87 replies which referred to perceived past controversy. Of these, 36 simply noted that controversy was believed to have occurred without expressing specific opinion. Reservation about, or opposition to, medication was implied by 18 responses and 3 favored medication. 12 implied criticism of the media or of public communications and 18 were of miscellaneous import. (Table 27)

Question 14 (Table 28) asked for comments on mistakes which had been made locally in the past. The statistics again represent number of comments rather than number of persons. There were 79 "no" responses, denying belief that errors had been made in the community. Professional practice was

criticized by 15 and 2 were to the effect that medication should not have been used. A slower or more conservative approach was suggested by 26 replies and 30 respondents believed that a more vigorous program should have existed. The largest number, 36, believed that public information had been inadequate or misleading and 20 responded that mistakes had been made but did not specify their nature.

VI. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Impact of the *Freedman Report*

(1) The *Freedman Report* was primarily useful for confirming prior, professional opinion, allaying uncertainties and for discussion of the topic. Its overall impact as a source of new information was minimal. This is not unexpected since so many professionals were familiar with the subject and in agreement with the conference findings contained in the report.

(2) Data about the distribution of the report do not reveal how much "filtering down" or referral may have taken place among educators, particularly to classroom teachers. However, it appears likely that these educators who first encounter the hyperkinetic child and who are most likely to start a process of referral, were insufficiently reached by the report which could be important to any teacher in grades kindergarten through six.

Paths of Communication

(1) There is an "invisible college" among physicians interested in research on hyperkinesis. These professionals are kept aware of each other's work and of developments in the field. There is no parallel among educators who lack the benefit of spokesmen for

research results or a path of communication for diffusion of current, scientific knowledge as it affects children in schools.

(2) On the subject of hyperkinesis, which is exceedingly complex, laymen credited professional counsel as the *most important* source of information. This is in agreement with studies of preferred science information sources and the general public reviewed by Paisley.[1] Similar results were found when the topics in question were "Nutrition" and "Child Rearing." As a path of communication, the weakness of such communication lies in the fact that the layman must be stimulated to seek information. However, it is more likely to avoid the hazards of misunderstanding or inadequate supply of information which can stem from reliance on the public media as a single source. As a guide to an agency's need for disseminating scientific information, this conclusion can be supplemented by medical opinion found by O'Keefe[2] on the subject of medical information and mass media. Physicians favored mass media as a stimulus for laymen to seek professional help, but found the media inappropriate for comprehensive and reliable information.

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[1]Paisley, William J. *The flow of (behavioral) science information, a review of the research literature.* Stanford University, Institute for Communication Research. 1965, pp. V-15 ff.

[2]O'Keefe, *supra* p. 8.

Communication and Perceptions of the Issues

For individuals not personally involved--primarily those characterized as "leaders"--the public debate about stimulant drug treatment proved to be more disturbing than to professionals and parents. The latter were aware of the issues being raised and shared less in the reaction. Medical professionals and parents of children who had received treatment, having been previously exposed to the subject, were not vulnerable to the shock of discovering that stimulant drugs were being prescribed for young school children.

Changes in Opinion

Among the set of questions posed as part of the objectives, the effort to identify *who* makes changes in opinions must be recognized as the least successful. The number of respondents citing the *Freedman Report* as a source of changed opinion was too small for significant conclusions. It is not possible to ascribe effective changes to this report in particular; nor can an extension be offered to a more general application for comparable, scientific communications which appear as "separates" or self-contained publications outside the conventional, scientific journal flow of information.

This may be a result of a defect in the method employed. However, the complexity of measuring elements of change clearly requires a closer monitoring of a target population than a retrospective survey can accomplish.

The best that can be learned may be that laymen showed a reliance on professional counsel as their most important source of information on the complex problems of hyperkinesis. Professional sources are makers and leaders of opinion among the *concerned* non-professionals and, as such, take precedence over mass communication media as a choice for stimulating a desired change.

Method of the Study

(1) The retrospective survey method is not well-suited to research on opinion changes. Such studies should be performed at the same time that events occur which are potential bases for changes in opinion.

(2) The construction of critical population samples in groups that are not identifiable from open, available sources is too costly for large populations. For example, parents of children receiving any medical treatment are particularly sheltered from enquiry. Classroom teachers are not listed through any national membership. They can only be identified locally, and in many instances, only with cooperation from school officials which may or may not be granted.

Recommendations

Development of a Dissemination Base

That OCD construct a profile of organizations and facilities that have special child welfare interests which coincide with major OCD concerns. Such organizations have mailing lists and a knowledge of the populations whose interests they serve.

When OCD is preparing a communication, appropriate organizations can be queried to determine whether their members should receive copies and how many they might distribute.

Such a plan could give access to individuals who have a defined interest in some aspect of child welfare. Organization participation as distributors also may increase reader interest and acceptance.

Publication of Future Communications

That the principal sources of each community be used as vehicles for publication: professional journals for professionals; magazines and newspapers for laymen. Household magazines or serialized articles in newspapers can carry verbatim scientific reports directly to a lay audience. Press releases can only arouse the interest of those who will make the effort to procure a copy. But added explanation and background information are essential to explain the more technical language of a communication written for professionals in a specialized field.

Format and Presentation

The design and appearance of communications should be consistent with audience preferences. Probably the best attainable form is that of a reprint from a recognized journal. This ensures a proper imprint and date for future reference. Documents lacking these details can never be clearly cited nor can they be procured by researchers or other readers.

SAMPLE STRUCTURE: SUBCATEGORIES, CODING, SAMPLE SIZES

ODE	DESCRIPTION	.001	.002	.003	TOTALS
0	MEDICAL AND PSYCHOLOGY PROFESSIONALS				
11	NINDS Pediatric Grant Holders	------	15/3	------	15/3
12	APA Psychologists (Clinical/Child)	20/10	20/16	------	40/26
13	AACP Child Psychiatrists	50/30	50/27	------	100/57
14	General Practitioners in Family Practice	------	100/36	------	100/36
21	Fellows, AA Pediatrics	100/44	------	------	100/44
22	Specialists, AA Pediatrics	127/72	------	------	127/72
23	APA Psychologists (Developmental)	10/6	10/6	------	20/12
24	APA Psychologists (Educational)	10/5	10/3	------	20/8
25	APA Psychologists (School)	10/8	10/5	------	20/13
	Totals	327/175	215/96	------	542/271
0	SCHOOL-LEVEL EDUCATORS				
12	Primary Teachers	------	37/27	25/24	62/51
13	Secondary Teachers	------	------	25/8	25/8
21	Guidance Counselors	20/14	20/11	20/18	60/43
23	Special Educators	------	------	25/25	25/25
24	School Nurses	25/15	------	------	25/15
25	Teacher Educators	------	------	25/22	25/22
	Totals	45/29	57/38	120/97	222/164
0	PUBLIC OFFICIALS				
11	State Level School Officials	------	45/35	18/15	63/50
13	Metropolitan Superintendents Maj. Caucs.	10/5	10/5	10/6	30/16
14	Metropolitan Superintendents - Hi minor.	10/10	10/9	10/10	30/29
15	Medium City Superintendents	10/8	10/5	10/5	30/18
16	Small City Superintendents	10/9	10/4	10/3	30/16
21	State School Health Officials	------	25/3	------	25/3
23	Large City Health Officials	------	25/14	------	25/14
24	Small City Health Officials	------	25/16	------	25/16
25	School Board Members	25/12	25/12	------	50/24
26	State Legislature Committee Members	------	25/21	------	25/21
	Totals	65/44	210/124	58/39	333/207

See page A3 for notation

ODE	DESCRIPTION	.001	.002	.003	TOTALS
.0	CONCERNED LAYMEN				
.11	Churchmen	------	50/16	------	50/16
.12	Media Leaders	------	14/12	------	14/12
.13	Women Voters	------	30/21	------	30/21
.15	JAYCEES	------	50/28	------	50/28
.16	AFL/CIO Members	------	30/1	------	30/1
.17	Louisiana PTA Chairmen	25/0	25/0	------	50/0
.18	Kiwanis Laymen	22/10	20/7	------	42/17
.21	Impacted Parents	------	------	9/9	9/9
.23	Adversaries	------	------	7/3	7/3
.24	Readers of Children	------	------	31/12	31/12
	Totals	47/10	219/85	47/24	313/119
	GRAND TOTAL	484/258	701/343	225/160	1,410/761

NOTATION

Code: Integral value (left of decimal point, vertical) indicates major sample category

Decimal places 1 and 2 (right of decimal point, vertical indicates subsample by category of respondent, as described in Description column.

Decimal place 3 (horizontal by column) indicates whether subjects did/did not receive copies of the Freedman Report.

N: Number to the left of slash (1) indicates questionnaires mailed. Number to the right indicates questionnaires returned. See attachment B for detail of coding.

DESCRIPTION OF SUBSAMPLES

CODE	DESCRIPTION
1.11x	NINDS Grantholders Source: NINDS Correspondence
1.12x	Fellows and Members of the American Psychological Association, Division of Clinical Psychology Source: APA 1970 Biographical Index
1.13x	Members of the American Association of Child Psychiatry, Source: AACP Directory 1970
1.14x	General Practitioners in family practice Source: Local AMA county secretaries
1.21x	American Academy of Pediatrics. Random sample of members Source: 1971 Fellowship List of the American Academy of Pediatrics
1.22x	American Academy of Pediatrics. Members of selected boards and committees Source: 1971 Fellowship List of the American Academy of Pediatrics
1.23x	Fellows and Members of the American Psychological Association Source: APA 1970 Biographical Index, Division of Developmental Psychology
1.24x	Fellows and Members of the American Psychological Association, Division of Educational Psychology Source: APA 1970 Biographical Index
1.25x	Fellows and Members of the American Psychological Association, Division of School Psychology Source: APA 1970 Biographical Index
2.122	Teachers, primary Source: Mailing to principles as listed in DHEW/USOE Education Directory 1970-71.
2.123	Teachers, Primary who requested the Freedman Report from OCD Source: Requests sent to OCD
2.133	Teachers, Secondary Schools who requested the Freedman Report Source: Requests sent to OCD

CODE	DESCRIPTION
2.211	Members, American School Counselor Association Source: ASCA
2.212	Key members of American School Counselor Association Source: ASCA
2.213	Guidance Counselors in elementary schools who requested Freedman Report as a result of notice in Education USA Source: Requests sent to OCD
2.233	Special Educators who requested the Freedman Report Source: Requests sent to OCD
2.241	School nurses, random sample, who requested the Freedman Report Source: Requests sent to OCD
2.253	Teacher Educators who requested the Freedman Report Source: Requests sent to OCD
3.112	State level school administrators Source: Council of State School Officers and Kiwanis International
3.113	State School Administrators who requested the Freedman Report Source: Requests sent to OCD
3.131	Superintendents of large metropolitan systems with white student population greater than 68% who received the Freedman Report Source: Requests sent to OCD; DHEW/Office of Civil Rights Directory, Enrollment and Staff by Ethnic Groups; USOE 1970-71 Education Directory
3.132	Superintendents of large metropolitan systems with white student populations greater than 68%, not sent the Freedman Report Source: American Association of School Administrators Machine Listing, August 1971; DHEW/Office of Civil Rights Directory, Enrollment and Staff by Ethnic Groups
3.133	Superintendents of large metropolitan systems with predominantly white student populations greater than 68% who requested the Freedman Report from OCD Source: Requests sent to OCD and same as 3.131
3.141	Superintendents of large metropolitan systems with substantial minority student populations greater than 33%, who received the Freedman Report by OCD mailing Source: Same as 3.131

CODE	DESCRIPTION
3.142	Superintendents of large metropolitan systems with substantial minority student population greater than 33% who did not receive the Freedman Report directly. Source: Same as 3.132
3.143	Superintendents of medium sized systems with predominantly white student population greater than 86% who received direct mailing of the Freedman Report from OCD Source: Same as 3.133
3.151	Superintendents of medium sized systems with predominantly white student population greater than 86% who received direct mailing Source: Same as 3.131
3.152	Superintendents of medium sized systems with predominantly white student population greater than 86% who did not receive the Freedman Report from OCD Source: Same as 3.132
3.153	Superintendents of medium sized systems with predominantly white student population greater than 86% who requested the Freedman Report from OCD Source: Same as 3.133
3.161	Superintendents of small systems who received the Freedman Report by direct OCD mailing Source: Same as 3.131
3.162	Superintendents of small systems, who did not receive a direct mailing of the Freedman Report Source: 3.132
3.16x	Superintendents of small systems who requested the Freedman Report from OCD Source: Same as 3.133
3.21x	State and county chief school health officers Source: American School Health Association
3.23x	City School Health Officers, large urban systems Source: American School Health Association
3.24x	City school health officers, small or medium size systems Source: American School Health Association

CODE	DESCRIPTION
3.25x	School Board Members Source: Kiwanis International
3.26x	State Leaders, Education Commission of the United States (Chairmen of Senate and House Education Committees for the States Source: State Leaders Directory 1971-72
4.11x	Local Officials, National Council of Churches Source: Yearbook of Churches, 1971
4.12x	Media leaders who requested the Freedman Report Source: Kiwanis International and requests sent to OCD
4.132	League of Women Voters, Local presidents Source: League of Women Voters
4.15x	Members of local chapters, U.S. Jaycees, who are active in school affairs or aid to mentally handicapped children Source: Mailed by U.S. Jaycees
4.16x	Labor: Members of local AFL/CIO staffs with responsibility for community affairs Source: AFL/CIO, Washington, D.C. office
4.17x	Louisiana PTA Source: Louisiana PTA
4.18x	Kiwanis laymen Source: Kiwanis International
4.213	Impacted parents who received Freedman Report mailing from OCD on request Source: Requests sent to OCD
4.233	Expressed adversaries of medication who have received OCD mailing of the Freedman Report on request Source: Requests sent to OCD
4.243	Readers of Children who requested the Freedman Report from OCD Source: Requests sent to OCD

SUMMARY OF ISSUE DATA

1. Does subject know about child hyperkinesis? and perceive a controversy?

2. How does subject perceive:

   .1 The syndrome and diagnosis.
   .2 Drug treatment and alternatives
   .3 Public management of the problem

3. How were perceptions formed?

   .1 Before controversy
   .2 After controversy
   .3 Change subsequent to controversy

4. Identity of subject:

   .1 Socio-economic and professional status of subject
   .2 Geographic identity
   .3 Related knowledges and perceptions

5. Did behavior change as a result of information received?

ISSUE SUMMARY

1. Is issue perceived?

   1. Is subject aware of hyperkinesis (hyperactivity, minimal brain dysfunction) as a presumed disorder of children?

   2. Is subject aware that stimulant drugs are used as one mode of treatment?

   3. Is subject aware of controversy about treatment using drugs?

2. Perception of component issues?

   1. How is the syndrome perceived?

      1.1A When properly diagnosed, it is a defect or abnormality of primarily natural or physical cause.
      1.1B It is an abnormality caused in part by social conditions.
      1.1C It is a psychiatric or psychosocial disease.

1.1D It is not a defect or abnormality, but is an expression invented to label children who do not conform.

1.2A Hyperkinetic children are essentially different from others in an undesirable way.

1.2B Hyperkinetic children are often just more energetic, excitable, enthusiastic or creative than others.

1.3A Hyperkinesis can be reliably diagnosed in most serious cases.

1.3B Hyperkinesis is so difficult to determine that it cannot be reliably diagnosed.

1.4A No one knows exactly what hyperkinesis is, but the evidence is that it requires specific treatment

1.4B No one knows exactly what hyperkinesis is, and therefore, it should not be treated as if it were an abnormality.

2. How is the treatment perceived?

2.1A Stimulant drugs are a proper treatment under some circumstances, either by themselves or with other treatment or training.

2.1B Stimulant drugs may sometimes be useful, but should be avoided in every way possible.

2.1C Drugs should not be used to treat hyperkinesis in children.

2.2 Regardless of whether drugs should or should not be used, they have certain hazards. The following are/are not serious hazards:

2.2.1 Use of stimulants to control hyperkinesis leads to addiction.

2.2.2 Drugs probably produce a psychological habit of dependence.

2.2.3 Using drugs to solve life's problems leads to a bad attitude toward medication.

2.2.4 Drugs may cause genetic damage.

2.2.5 Drugs may have dangerous side effects, or long term effects.

2.2.6 Prescribing drugs to children puts too many drugs in circulation around the school and the family.

2.2.7 Taking drugs labels the child as abnormal.

2.2.8 Drugs are badly controlled or deceptively labelled by the drug industry.

2.2.9 Drugs are promoted for the profit of the drug industry.

2.2.10 Taking drugs may disguise other medical problems.

2.2.11 Taking drugs is an easy substitute for more natural, effective or less dangerous modes of treatment.

2.3 The 'Paradoxical effect' refers to the fact that some children seem calmer when taking small doses of stimulant drugs. This means that:

2.3A The drugs dull them and make them easier to manage.
2.3B The drug increases their ability to choose what they want to do.
2.4A All children exhibit the "paradoxical effect".
2.4B Only children who are actually hyperkinetic exhibit the "paradoxical effect".
2.5 Treatment modes other than drugs have been suggested for hyperkinetics. The following are (better) (not as effective) (don't know) (used in conjunction or as prescribed).
2.5.1 Less inhibiting, more interesting, stimulating and responsive schools.
2.5.2 Special schools.
2.5.3 Behavior modification training.
2.5.4 Psychiatric treatment
2.6 Did prescribing change behavior?

2.4 Public management of hyperkinesis

3.1A Evidence is that, on the whole, the problems of child hyperkinesis have been dealt with by sincere people (doctors, educators, officials) acting on the best available knowledge and in the interest of children.
1B Evidence is that, on the whole, the problems of child hyperkinesis have been dealt with by sincere people but they have made serious errors due to carelessness or bad information.
1.3.1C Evidence is that, on the whole, the problems of child hyperkinesis have been dealt with by public figures who were more interested in their own welfare or convenience than in the welfare of children.
1.3.1D Evidence is that, on the whole, efforts to deal with child hyperkinesis have been directed at forcing children and their families to conform to the standards of the white middle class.
1.3.2 It is (true/not true) that information has been gathered and maintained, concerning children suspected as hyperkinetic, in a way that threatens their future and their constitutional liberties.
1.3.3 It is (true/not true) that undue pressure by unqualified people has been brought upon parents to force them to participate in treatment programs.
1.3.4 It is (true/not true) that drug treatment of hyperkinetics is a technology which is expanding explosively, under the control of scientists who are more interested in their experiments than in their effect on children and society
1.3.5 It is (true/not true) that drug treatment of hyperkinetics is a technology which threatens human values by seeking control over children's minds.

1.3.6 Schools (should/should not) have a role in identifying hyperkinetic children, and in observing the effects of treatment.

1.3.7 Schools (should/should not) assist in controlling the administration of drugs prescribed for children to take during the school day.

1.3.8 Has there been adequate public education?

3. What is the source of the information on which opinion/perception is based?

3.1 Did the subject who received a mailing of the Freedman Report:

3.1.1 Know about the panel before publication of the report?

3.1.2 Have a strong opinion about stimulant drugs before publication?

3.1.3 Remember receiving a copy?

3.1.4 Actually read it?

3.1A Understand it as discouraging drugs as a treatment?

3.1.5B Understand it as not taking a clear position?

3.1.6C Understand it as a cautious endorsement of drug treatment?

3.1.5D Understand it as unequivocally supporting drug treatment?

3.1.6 Did the subject see the Freedman Report, or news about it published in a professional publication

3.2 Where did the subject (both those who did and those who did not receive mailings) get his general opinions held before the controversy (as of about June 1970)?

3.2.1 Before the controversy subject:

3.2.1A Did not know about drug treatment of hyperkinesis..

3.2.1B Did not have an opinion.

3.2.1C Generally opposed use of drugs.

3.2.1D Generally favored use of drugs.

3.2.2 The subject ascribes that opinion to information received:

3.2.2A From a non-professional friend, or personal contact.

3.2.2B From an authority figure: Doctor, teacher, councelor, professional contact.

3.2.2CA From a newspaper or magazine, which was not perceived as taking a position.

3.2.2CB From a newspaper or magazine which was perceived as promoting the use of drugs.

3.2.2CC From a newspaper or magazine which was perceived as opposing the use of drugs as a treatment mode.

3.2.2D From a professional journal or professional society.

3.2.2E From a drug company literature, films, or representative.

3.2.2F Through a government or school distributed publication or literature.

3.2.2G Through an organization centered on parents and others concerned with child welfare.

3.3 Where did the subject get his opinions held immediately after the controversy (as of December 1970)?

3.3.1 At that time the subject:
3.3.1A Was not aware of the controversy.
3.3.1B Was aware, but does not think his opinion was affected.
3.3.1C Was aware, and changed his opinion.
3.3.1D Was aware, and had his existing opinion confirmed.
3.3.2 The subject ascribes any knowledge of the controversy to information received:
3.2.2A From a professional friend or personal contact.
3.2.2B (through 3.3.2G, same as s.2.sB through G)

3.4 Where did the subject get the opinion he now holds?
3.4.1A He remains uncommitted, or continues to know nothing about drug treatment of hyperkinesis.
3.4.1B He generally opposes use of drugs.
3.4.1C He generally favors use of drugs.
3.4.2 The subject ascribes any change in his opinion since December 1970 to:
(same list of possible sources. Add after 3.4.2F:
3.4.2FF The Freedman Report, or reflection of that report in professional communications (journals, meetings, personal contacts).

4. Identity of subject

4.1 Subject identifies self as:
4.1A Physician.
4.1B A classroom teacher or educational professional.
4.1C A public official, including senior school administrators.
4.1D Other professional concerned with child welfare.
4.1E Religious leader of church worker.
4.1F Parent of a hyperkinetic child.
4.1G Other parent.
4.1H Other layman

4.2 Geographic area.
4.2A Greater New York City.
4.2B Washington, D.C. area.
4.2C Northeast U.S.
4.2D South
4.2E Midwest
4.2F Southwest

4.4 Perception of relationship to government and establishment:
4.4A Sees as an adversary.
4.4B Seen as neutral or allied.

4.5 Perception of formal science.
4.5A Sees research as an effective and impartial means of determining fact.
4.5B Sees research as possibly threatening.
4.5C Sees research as self-serving.

4.6 Perception of drugs as a semantic concept:
4.6A Drugs a term for addictive substances, and only rarely used to describe benign medications.
4.6B Drugs is a neutral concept, or one clearly differentiable

4.7A Do you have a child in school?
4.7B Do you know a hyperkinetic child personally?

RETURN CODING

Return coding refers to means of coding questionnaire materials so that certain data regarding the respondent can be dependably preserved. These must, of course, be data which do not identify him personally, or otherwise violate his privacy.

For this project, we will use return codes, formed by variations in format of the Biological Sciences Communication Project address, as a means of preserving the professional identification of respondents reflected by the address lists from which they were identified.

Return codes are shown on the Sample Professional Structure document as decimal numbers. These numbers identify the address codes described following:

First (10^{0}) position is identified in lines 1 and 2 of the address, as follows:

Code	Coded Address
1.0 (Medical)	The Medical Center Biological Sciences Communication Project xxxxxxxx xxxxxxxx xxxxxxxx
2.0 (Education)	The George Washington University Biological Sciences Communication Project xxxxxxxx xxxxxxxx xxxxxxxx
3.0 (Administration)	Biological Sciences Communication Project The George Washington University xxxxxxxx xxxxxxxx xxxxxxxx
4.0 (Lay)	Biological Sciences Communication Project The Medical Center xxxxxxxx xxxxxxxx xxxxxxxx

Code	Coded Address

First decimal position (10^{-1}) is identified by inclusion or omission of the word "The" at the beginning of the third address line:

N.1

xxxxxxxx
xxxxxxxx
The xxxxxxxxxxxx
xxxxxxxx
xxxxxxxx

N.2

xxxxxxxx
xxxxxxxx
xxxxxxxx
xxxxxxxx
xxxxxxxx

The third line will always be either:

The George Washington University
George Washington University
The Medical Center
(or)
Medical Center

Second decimal position (10^{-2}) is indicated by the format of the word "Street," and its following punctuation, in line 4:

N.N1

xxxxxxxx
xxxxxxxx
xxxxxxxx
2001 S Street, N.W.
xxxxxxxx

N.N2

xxxxxxxx
xxxxxxxx
xxxxxxxx
2001 S Street N.W.
xxxxxxxx

N.N3

xxxxxxxx
xxxxxxxx
xxxxxxxx
2001 S St. N.W.

N.N4

xxxxxxxx
xxxxxxxx
xxxxxxxx
2001 S St N.W.

Code	Coded Address
N.N5	xxxxxxxx xxxxxxxx xxxxxxxx 2001 S Street, NW xxxxxxxx
N.N6	xxxxxxxx xxxxxxxx xxxxxxxx 2001 S Street NW
N.N7	xxxxxxxx xxxxxxxx xxxxxxxx 2001 S St. NW xxxxxxxx
N.N8	xxxxxxxx xxxxxxxx xxxxxxxx 2001 S St NW xxxxxxxx

The third decimal position (10^{-3}) is indicated by inclusion or exclusion of punctuation following "Washington" in line 5:

N.NN1 (Mailed report originally)	xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx Washington, D.C. 20009
N.NN2	xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx Washington D.C. 20009
N.NN3	xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx Washington DC 20009

SAMPLE SELECTION BY DECIMATION

Described is the method used for providing a random sample of respondent names from within populations defined by a source document. Generally, sampling was by a method of decimation (as in cryptologic usage) from semi-random starting points, with application of rules to eliminate unsuitable respondents and to ensure geographic spread. Minor variations in the sampling algorithm were made to make it compatible with source documents (see Attachment B) Rules follow:

1. Establish a desired optimum N for the subsample, which will make that sample roughly proportional, nationally, the the population it represents.

   a. Where Nso is the optimum subsample size (being determined);

   b. And Nt is the total sample desired (1,500);

   c. And Nps is the number of persons, nationally, in the population represented by the subsample Nso;

   d. And Npt is the total number of persons represented by the total sample Nt;

   e. Then: $Nso = Nt \left(\frac{Nps}{Npt}\right)$

   f. Since precise input data are not available, these calculations are not performed literally, Nso is determined by the best available data and the judgement of the researchers, rounded to multiples of 10 or 25.

2. For certain populations identifiable as key decision makers, the entire population is surveyed (Npt). (1.221, members of the Committee on School Health, American Academy of Pediatrics)

3. Where the Nso exceeds the number of names available on the resource document, all available names were used (4.213, impacted parents)

4. Where Nso is smaller than the number of names in the resource document, sample by decimation as follows:

5. Select one or more starting points by opening the document at random to one or more pages, and taking the Nth name on the page found.

6. Determine by inspection whether the starting points are defective as in the case of being followed by an atypical population (names in Mc/Mac).

7. Count from the sleected starting point N names, where N is:

   a. If only one starting point is used, N should be a number which will result in counting, cyclically, through the entire document one or more times. (Used for small documents)

   b. If more than one starting point is used, N is on the order of 20 or 25.

8. Select the name at which N falls if it meets selection criteria:

   a. Not foreign

   b. Not in Washington, D.C.

   c. Not emeritus or otherwise recognizable, by inspection, as outside the concerned population.

   d. Address appears complete.

9. Continue selecting every Nth name until Nso is filled.

10. Adjust for geographic representativeness by one of three procedures.

   a. Where source document is expressed by state, select N from each low population state and 2N from each high population state.

   b. For small Nso, inspect for obvious failure to provide regional coverage; select additional names as required.

   c. For large Nso, select to fill Nlt 1 name for each state, except states of very small population (Nevada) for which random sampling does not produce a list. Add additional names randomly selected for high population states.

SUMMARY OF REQUESTS FOR FREEDMAN REPORT RECEIVED BY OFFICE OF CHIL

Requests Received from:	Requests Addressed to:						
	Sid Rosendorf	Zigler	OCD	Office of Asst. Sec.	Drug Panel Report	Pauline Tait	U.S. Chil
CENTERS & CLINICS FOR CHILDREN	-	1	12	1	29	-	
CLINICAL PSYCHOLOGISTS	-	1	30	3	11	1	
COLLEGE PROFESSORS	-	1	23	2	18	1	
CORPORATE & BUSINESS	14	-	7	-	5	2	
D/S ELEMENTARY	10	-	2	-	-	-	
D/S GUIDANCE, PUPIL PERSONNEL, INSTRUCTION CURRICULUM	33	3	24	3	8	5	
D/S FEDERAL PROGRAMS	9	-	-	1	-	-	
D/S PIO COMMUNITY RELATIONS	9	-	-	-	-	-	
D/S [illegible]TARCH	15	-	-	-	-	-	
D/S SECONDARY	10	-	-	-	-	-	
D/S SPECIAL SERVICES	14	1	-	-	-	-	
EDUCATIONAL ASSOCIATIONS	19	-	1	-	-	-	
FEDERAL ACTIVITIES	4	-	7	-	4	1	
GENERAL HOSPITALS	-	2	-	-	7	1	
DRUG ABUSE PROGRAM	-	-	2	-	2	-	
LAYMEN	3	3	182	7	122	10	1
LIBRARIES, PUBLIC	-	-	-	-	-	-	
MEDIA	-	-	-	-	1	-	
NURSERY SCHOOL, L & K6	-	-	-	-	3	-	
LEGISLATORS	-	-	-	-	-	3	
M.D., NO INSTITUTION	-	2	28	-	22	4	1
NURSE, SCHOOL NURSE, HEALTH OFFICER	19	4	14	7	20	6	1
OCCUPATIONAL THERAPIST	-	-	-	-	1	-	
O.D. & CLINICS	-	-	10	-	3	-	
POLICE, COURTS & PENAL INSTITUTIONS	-	-	13	-	47	1	
PHARMACOLOGISTS	-	-	2	-	4	1	
PEDIATRIC PSYCHIATRIST	-	2	7	-	2	2	
PEDIATRICIANS	-	-	6	4	6	1	
PRINCIPALS	463	-	22	2	9	3	2
PROFESSIONAL EDUCATION	46	2	7	-	7	-	
PSYCHIATRIC CLINICS & HOSPITALS INCLUDING UNIVERSITIES	-	-	5	1	3	1	

SUMMARY OF REQUESTS FOR FREEDMAN REPORT RECEIVED BY OFFICE OF CHILD DEVELOPMENT, H.E.W.

	Requests Addressed to:								
	Sid Rosendorf	Zigler	OCD	Office of Asst. Sec.	Drug Panel Report	Pauline Tait	U.S. Off. Child Dev.	Vertical File Ind.	No source
	-	1	12	1	29	-	8	-	1
	-	1	30	3	11	1	-	-	-
	-	1	23	2	18	1	1	-	-
	14	-	7	-	5	2	3	-	2
	10	-	2	-	-	-	-	-	-
	33	3	24	3	8	5	55	-	2
	9	-	-	1	-	-	2	-	-
	9	-	-	-	-	-	-	-	-
	15	-	-	-	-	-	-	-	-
	10	-	-	-	-	-	-	-	-
	14	1	-	-	-	-	-	-	-
	19	-	1	-	-	-	-	-	-
	4	-	7	-	4	1	-	-	-
	-	2	-	-	7	1	-	-	-
	-	-	2	-	2	-	-	-	-
	3	3	182	7	122	10	12	-	42
	-	-	-	-	-	-	-	1	48
	-	-	-	-	1	-	3	-	-
	-	-	-	-	3	-	-	-	-
	-	-	-	-	-	3	-	-	-
	-	2	28	-	22	4	13	-	-
FICER	19	4	14	7	20	6	19	-	4
	-	-	-	-	1	-	-	-	-
	-	-	10	-	3	-	2	-	-
TIONS	-	-	13	-	47	1	-	-	-
	-	-	2	-	4	1	-	-	-
	-	2	7	-	2	2	2	-	-
	-	-	6	4	6	1	1	-	-
	463	-	22	2	9	3	20	-	3
	46	2	7	-	7	-	-	-	-
	-	-	5	1	3	1	1	-	-

Requests Received from:	Requests Addressed to:						
	Sid Rosendorf	Zigler	OCD	Office of Asst. Sec.	Drug Panel Report	Pauline Tait	U.S. Chil
PSYCHIATRISTS	-	1	12	-	2	-	
REGIONAL/COUNTY SUPERVISORS	10	-	-	-	-	-	
SCHOOL BOARD OF EDUCATION	-	-	3	-	-	-	
SOCIAL WORKER & SERVICES (EASTER SEAL, ETC.)	1	3	60	7	64	11	
SCHOOL & EDUCATIONAL PSYCHOLOGISTS	25	6	91	5	11	2	
SCHOOL SYSTEMS LIBRARIES, TEACHERS	317	5	97	6	37	3	
SPECIAL EDUCATION	48	3	55	2	17	10	
STATES, COUNTIES & REGIONS	14	2	34	3	39	6	
STUDENTS (COLLEGE)	-	2	4	-	-	2	
SUBSCRIBERS TO "EDUCATION USA" NO INSTITUTION	102	-	-	-	-	-	
SUPERINTENDENT & ASSISTANT SUPER.	335	3	12	1	4	-	
UNIVERSITIES (MISCELLANEOUS)	18	1	25	-	12	-	
VISTA	-	-	2	-	3	-	
TOTALS	1,538	48	799	55	523	77	

	Requests Addressed to:									
	Sid Rosendorf	Zigler	OCD	Office of Asst. Sec.	Drug Panel Report	Pauline Tait	U.S. Off. Child Dev.	Vertical File Ind.	No source	
	-	1	12	-	2	-	-	-	-	
	10	-	-	-	-	-	-	-	-	
	-	-	3	-	-	-	2	-	-	
STER										
	1	3	60	7	64	11	7	-	-	
OGISTS	25	6	91	5	11	2	16	-	1	
ACHERS	317	5	97	6	37	3	88	4	34	
	48	3	55	2	17	10	18	-	1	
	14	2	34	3	39	6	-	-	-	
	-	2	4	-	-	2	1	-	-	
A"										
	102	-	-	-	-	-	-	-	-	
UPER.	335	3	12	1	4	-	4	-	-	
	18	1	25	-	12	-	26	-	3	
	-	-	2	-	3	-	-	-	-	
	1,538	48	799	55	523	77	304	5	141	349

BIOLOGICAL SCIENCES COMMUNICATION PROJECT
THE GEORGE WASHINGTON UNIVERSITY MEDICAL CENTER
Medical and Public Affairs

• • •

QUESTIONNAIRE

To Explore Public and Professional Awareness of Issues in the Treatment of Child Hyperkinesis

As you may know, hyperkinesis is a condition of increased motor function or activity which is particularly noted in school age children. It is sometimes called "minimal brain dysfunction" or "hyperactivity." Typically, it causes children to be unusually restless, irritable and unable to concentrate attention. Your answers to the following questions will assist the planning of better programs for child health care.

1. Have you heard or read anything recently about a treatment for hyperkinesis using drugs? (Circle one)

   YES

   NO

2. Have you heard or read criticism of drug treatment for hyperkinetic children? (Circle one)

   YES

   NO.

   a. If you answered "YES" to question 2, do you happen to remember the criticisms? (Circle one)

      YES

      NO

   b. If you answered "YES" to question 2a, please mention some of the criticisms:

3. In the light of what you have read, do you feel that the criticism is generally justified or unjustified? (Circle one)

JUSTIFIED

UNJUSTIFIED

a. If you answered "JUSTIFIED" to question 3, which ones in particular do you think are justified? (Write in below)

4. Have you seen, or do you know about a report (*Report of The Conference on The Use of Stimulant Drugs in The Treatment of Behaviorally Disturbed Young School Children*) by a committee of scientists who met early this year with the Office of Child Development, Department of Health, Education and Welfare, and made recommendations concerning the treatment of child hyperkinesis using stimulant drugs? (Circle one)

YES, read report

YES, heard about report but have not read it

NO, have not heard about report

IF YOU ANSWERED "NO" TO QUESTION 4, SKIP TO QUESTION 9.

5. Do you recall anything in particular about what was said in this report? (Circle one)

YES

NO

a. If you answered "YES" to question 5, what are the important points you remember?

6. As a result of this new information, have your opinions and feelings about the treatment of child hyperkinesis changed at all, and in what way?

7. As a result of this new information, did you or your organization do anything specific about treatment of child hyperkinesis? If so, what?

8. As a result of this new information did any other organization in your community do anything specific about the treatment of child hyperkinesis?

9. We cannot always tell where information comes from; but as well as you can remember, where did you get your information about the treatment of hyperkinesis? The more important sources were: (Circle more important sources)

The report itself	Friends
The newspapers	School
Professional journals	PTA
Organizational meetings	Social worker
Professional meetings	Counselors
Colleagues	Radio and TV
Other (Specify):	

THE RESULTS OF THE QUESTIONNAIRE ARE TO BE CONFIDENTIAL–WE DO NOT ASK TO USE YOUR NAME, BUT PLEASE ANSWER A FEW QUESTIONS ABOUT YOURSELF TO BE USED FOR STATISTICAL PURPOSES.

10. Your occupation

11. Are any of your children in school, that is, in kindergarten through grade 12? (Circle one)

    YES

    NO

12. Do you know a hyperkinetic child personally? (Circle one)

    YES

    NO

13. I live in a: (Circle one)

    Large city

    Medium-sized city

    Suburb

    Small town or rural community

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202-462-5828

EXPLANATION OF CODING USED FOR RETURNED QUESTIONNAIRES

BIOLOGICAL SCIENCES COMMUNICATION PROJECT
THE GEORGE WASHINGTON UNIVERSITY MEDICAL CENTER
Medical and Public Affairs

• • •

QUESTIONNAIRE

To Explore Public and Professional Awareness of Issues in the Treatment of Child Hyperkinesis

As you may know, hyperkinesis is a condition of increased motor function or activity which is particularly noted in school age children. It is sometimes called "minimal brain dysfunction" or "hyperactivity." Typically, it causes children to be unusually restless, irritable and unable to concentrate attention. Your answers to the following questions will assist the planning of better programs for child health care.

1. Have you heard or read anything recently about a treatment for hyperkinesis using drugs? (Circle one)

   YES - 1

   NO - 2

2. Have you heard or read criticism of drug treatment for hyperkinetic children? (Circle one)

   YES - 1

   NO - 2

   a. If you answered "YES" to question 2, do you happen to remember the criticisms? (Circle one)

      YES - 1

      NO - 2

   b. If you answered "YES" to question 2a, please mention some of the criticisms:

      SEE SEPARATE SHEET

3. In the light of what you have read, do you feel that the criticism is generally justified or unjustified? (Circle one)

JUSTIFIED SEE SEPARATE SHEET

UNJUSTIFIED

a. If you answered "JUSTIFIED" to question 3, which ones in particular do you think are justified? (Write in below)

SEE SEPARATE SHEET, SAME AS 2b.

4. Have you seen, or do you know about a report (*Report of The Conference on The Use of Stimulant Drugs in The Treatment of Behaviorally Disturbed Young School Children*) by a committee of scientists who met early this year with the Office of Child Development, Department of Health, Education and Welfare, and made recommendations concerning the treatment of child hyperkinesis using stimulant drugs? (Circle one)

YES, read report -1

YES, heard about report but have not read it -2

NO, have not heard about report - 3

IF YOU ANSWERED "NO" TO QUESTION 4, SKIP TO QUESTION 9.

5. Do you recall anything in particular about what was said in this report? (Circle one)

YES - 1

NO - 2

a. If you answered "YES" to question 5, what are the important points you remember?

SEE SEPARATE SHEET

6. As a result of this new information, have your opinions and feelings about the treatment of child hyperkinesis changed at all, and in what way?

1 - Feeling that efficacy of treatment now scientifically proven; seems to work; less skeptical.
2 - More education and publicity now necessary, teachers, parents, pres
3 - Increased awareness of nature and extent of problem.
4 - Assurance; fears calmed.
5 - Reports changed attitude in favorable direction.
6 - Reports changed attitude in unfavorable direction.
7 - Did not regard as new information.
8 - General skepticism.
9 - NO

7. As a result of this new information, did you or your organization do anything specific about treatment of child hyperkinesis? If so, what?

1 - Workshops, staff information including circulation of report, gave information to class.
2 - Used to convince parents, community, physician.
3 - Sought additional information on topic.
4 - Set up medical screening process.
5 - Treatment of disorder changed.
6 - Not yet, maybe in future, plans unspecified.
7 - NO
8 - No already doing something
9 - Did not regard as new information.

8. As a result of this new information did any other organization in your community do anything specific about the treatment of child hyperkinesis?

1 - No
2 - Other (handtab)
X Don't know
Y Missing information

9. We cannot always tell where information comes from; but as well as you can remember, where did you get your information about the treatment of hyperkinesis? The more important sources were: (Circle more important sources)

The report itself	Friends
The newspapers	School
Professional journals	PTA
Organizational meetings	Social worker
Professional meetings	Counselors
Colleagues	Radio and TV
Other (Specify):	

Note: First display of No. 9 shows number of sources circled.

THE RESULTS OF THE QUESTIONNAIRE ARE TO BE CONFIDENTIAL–WE DO NOT ASK TO USE YOUR NAME, BUT PLEASE ANSWER A FEW QUESTIONS ABOUT YOURSELF TO BE USED FOR STATISTICAL PURPOSES.

10. Your occupation

11. Are any of your children in school, that is, in kindergarten through grade 12? (Circle one)

    YES

    NO

12. Do you know a hyperkinetic child personally? (Circle one)

    YES

    NO

13. I live in a: (Circle one)

    Large city

    Medium-sized city

    Suburb

    Small town or rural community

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QUESTION 5a

01. Endorsement with reservations: need for expert medical supervision understanding the nature of the treatment; careful control; parental approval

02. General endorsement of the use of amphetamines; it works

03. Caution against mis-diagnosis; necessary screening of patient

04. There is little known about the cause

05. Short trial periods should be given with careful supervision

06. No evidence of dependency or addiction

07. Drugs are not sufficient by themselves

08. General description of report

09. Role of drug industry; pressures from drug industry; drug industries should advertize only through medical channels

10. Incidence of disorders to be helped (includes reference to numbers of children)

11. Not enough research being done; not enough qualified physicians, more research needed

12. Other (handtab)

13. With treatment kids can function better

14. Number of % of children helped by treatment

XX. Don't know

YY. Missing information

QUESTIONS 2b and 3a

01. Use of drugs without adequate medical diagnostic assessment, supervision, follow-up

02. Artificial control; doping children into submission; unwarranted control of behavior; substitution of drugs for patience

03. Used to reduce performance of Caucasian children to match that of minority group children

04. Used to control racial minority groups

05. Focus on symptoms rather than cause; doesn't get to basic problem; used as a crutch when environmental changes are really necessary; use of drugs masks other problems; out of ignorance

06. Critical on use of drugs on children—very adament

07. Misuse; overuse; indiscriminate use; high potential of misuse as a stimulant; used for "too long periods" of time; encourage or lead to drug abuse; children are sedated too much

08. Addiction; habit forming; dependency; addiction in later life

09. Undesired side effects; unknown effects; reduces functioning; harmful

10. Use by others; spreading around to other friends, other members of family

11. Minimal documental evidence of effectiveness; not enough research; results of long term use unknown

12. Parents not consulted; pressured, misled, etc.

13. Other (handtab)

14. Recommendation of drug use or dispensing of drugs by lay persons (e.g. school administrators, nurses, etc.)

15. Prescribed without exploring or considering other alternatives of treatment (e.g. behavior therapy): failure to receive other types of therapy

16. Drug culture—leads to, adds to, encourages, is involved in

QUESTION 3

1. Justified

2. Unjustified

3. Justified - supports treatment with drugs but opposes method

4. Justified - opposes treatment with drugs

5. Unjustified - supports treatment with drugs but opposes method

6. Both circled

7. Unjustified - criticized indiscriminate use of drugs by physicians

8. Somewhat justified

X. Don't know - inadequate information; have not evaluated claims; not sure; uncertain; no opinion

RETURN CODING

Return coding refers to means of coding questionnaire materials so that certain data regarding the respondent can be dependably preserved. These, must, of course, be data which do not identify him personally or otherwise violate his privacy.

For the second survey, special issue stamps were used as a means of preserving the professional identification of respondents reflected by the address lists from which they were identified.

CITY 1	RETURN STAMP
Medical	Maine + Frank Lloyd Wright
Educator (Special)	San Xavier Del Bac
Educator (Classroom)	Trout
Leaders	Antartic Treaty
Impacted Parents	San Juan, Puerto Rico
Lay Parents	Space Achievement: Moonscape

CITY 2	
Medical	Pilgrims + Frank Lloyd Wright
Educator (Special)	Cable Car
Educator (Classroom)	Polar Bear
Leaders	Eisenhower
Impacted Parents	American Revolution Bicentennial
Lay Parents	U.S. Postal Service

CITY 3	
Medical	Peace Corps
Educator (Special)	Charles W. Morgan
Educator (Classroom)	California Condor
Leaders	Missouri Statehood
Impacted Parents	Care
Lay Parents	Space Achievement: "Buggy"
Random Lay	Space Achievement: "Buggy" + BSCP return stamp on back

CITY 4	
Medical	Sidney Lanier
Educator (Special	Decatur House
Educator (Classroom)	Aligator
Leaders	John Sloan
Impacted Parents	Emily Dickenson
Lay Parents	American Flag

EXPLANATION OF CODING USED FOR RETURNED QUESTIONNAIRES

BIOLOGICAL SCIENCES COMMUNICATION PROJECT
THE GEORGE WASHINGTON UNIVERSITY MEDICAL CENTER
Medical and Public Affairs

Name Code:

1 Name given
2 Name not given

QUESTIONNAIRE

To Determine Public and Professional Perceptions of Issues in the Pharmacological Treatment of Child Hyperkinesis

1. Do you know about the use of stimulant medication to treat children who have a condition called "hyperkinesis," "minimal brain dysfunction syndrome," or "hyperactivity"? (Circle one)

YES - 1

NO - 2

IF YOUR ANSWER IS "NO," DO NOT COMPLETE THE REST OF THE QUESTIONNAIRE.

2. In your opinion, which of the following statements BEST DESCRIBES hyperkinesis? (Select one) X - no response
Y - not responsive, vague, don't know

☐ 0 *It is not really an abnormality.* Hyperkinesis is a catch-all term sometimes used to label children who are very active or who do not conform.

☐ 4 *It is a learning defect.* Hyperkinesis causes children to have difficulty in maintaining attention and in controlling their own behavior.

☐ . . *Neither of the above.* (Explain)

It is not really an abnormality but:
1 - a defect in teaching or education system
2 - a defect in social system
3 - labeling is a failure in semantic definitions

It is a learning defect which is:
5 - essentially medical
6 - behavioral
7 - not classifiable as med. or behav.
8 - medical and behavioral

3. Explain briefly how you learned about the treatment of hyperkinesis.

SEE ATTACHMENT

4. What one source of information was most important to you in forming your opinion?

SEE ATTACHMENT

5. Have you seen, or do you know about a report (*Report of the Conference on The Use of Stimulant Drugs in The Treatment of Behaviorally Disturbed Young School Children*) by a committee of scientists who met early this year and made recommendations about the treatment of child hyperkinesis using stimulant drugs? (Circle one)

1 -☐ YES, read report

2 -☐ YES, heard about, but have not read it

3 -☐ NO, have not heard about the report

6. If you know about that report, how did it come to your attention?

SEE ATTACHMENT

7. Did it help you to form your present opinion about the use of medication in managing hyperkinesis?

☐ a. PHYSICIANS AND EDUCATORS ONLY
Has it been useful to you in talking to others, including the public?

1 - Yes, or a check
2 - No
X - No response (for categories 1, 2, and 3 and if Q5 was 1 or 2)
Y - Uncodable

☐ b. PHYSICIANS ONLY
Did it change your practice of medicine in any way? Please explain.

1 - Yes, or a check
2 - No
3 - Strong no
4 - More confident and discriminating in diagnosing
5 - Do not treat children, someti es refer patients to proper source
6 - Learned that properly used medication can be of great benefit.
7 - Do not agree with the report
8 - No new facts
9 - More aware of a problem
X - no response (for category 1 if Q5 was 1 or 2)
Y - Uncodable

☐ c. EDUCATORS ONLY
Did it change your attitude or methods of teaching, suspected hyperkinetic children? Please explain.

SEE ATTACHMENT

8. Stimulant drugs such as Ritalin and amphetamines have been used to treat hyperkinetic children. In your opinion, which of the following best describes the proper use of such medication for children attending school? (Select only one)

1 - ☐ Medication is usually wrong. It should not ordinarily be used to modify the behavior of children in school.

2 - ☐ Medication is proper when carefully used. It should be used only after careful diagnosis, under care of a physician who knows about its limitations and hazards.

3 - ☐ Medication is usually right. It should generally be used to aid in the management of children who show hyperkinetic behavior.

9. Mark each of the following statements "yes" if you agree, and "no" if you do not agree:

YES NO Hyperkinesis is often caused by a physiological, neurological or other medical disorder.

YES NO Hyperkinesis is often caused by a psychological or emotional disorder.

YES NO Hyperkinesis is often caused by bad social conditions, malnutrition or deprivation.

YES = 1
NO = 2

YES NO Hyperkinesis is often caused by poor schools or teachers.

YES NO Hyperkinesis often means that a child is just restless, energetic, active, or creative.

YES NO Hyperkinesis often means that the school is not doing a good job in teaching.

YES NO Hyperkinesis is a word used by people who want to control or suppress children.

YES NO Hyperkinesis may be a desirable trait, which helps minority children to survive.

10. Mark each of the following statements "yes" if you agree, and "no" if you do not agree:

YES NO Stimulant drugs are often a proper treatment for hyperkinetic children.

YES = 1
NO = 2

YES NO It is never proper to use chemicals to tamper with the minds of children in school.

YES NO Prescribing drugs to hyperkinetic children is likely to lead to drug addiction.

YES NO Hyperkinetic children should be appreciated as they are; we should not try to change them.

YES NO Medication should not be used because it only masks the symptoms, and does not cure the cause.

11. Mark each of the following statements "yes" if you agree, and "no" if you do not agree:

YES = 1
NO = 2

YES NO In this city, drugs have been prescribed by people who are not doctors.

YES NO In this city, doctors who were not qualified to diagnose hyperkinesis have prescribed drugs.

YES NO In this city, the schools have put improper pressure on doctors or parents to get drugs prescribed.

YES NO In this city, drugs have been used to control the behavior of minority students, so that they will conform to white behavior.

YES NO In this city, drugs have been used to hold back the more intelligent students, so that other students can keep up with them.

12. Has there been any disagreement or strong objection to the use of medication for hyperkinetic children in this city? Explain.

SEE ATTACHMENT

13. Are you interested in hyperkinetic children because of your job, or for any special reason?

SEE ATTACHMENT

14. Looking back, can you see any mistakes which have been made in your community in handling the treatment of hyperkinesis, or the issues which surround it?

SEE ATTACHMENT

15. Have you any criticisms of the Freedman Report (*Report of the Conference on The Use of Stimulant Drugs in The Treatment of Behaviorally Disturbed Young School Children*)?

SEE ATTACHMENT

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QUESTION 3 - "Explain briefly how you learned about the treatment of hyperkinesis."
4 - "What one source of information was most important to you in forming your opinion?"

01 Newspaper (12)*
02 Magazine-- non-professional periodicals (11)
03 Professional literature and periodicals (6)
04 Colleagues (9)
05 Friend (7)
06 School nurse (3)
07 School psychologist (3)
08 Doctor (5)
09 Psychologist, psychiatrist (5)
10 Has a hyperkinetic child or suspected that he did (2)
11 Classroom teachers (3)
12 Know a hyperkinetic child, or know the parents of a hyperkinetic child, lay observatio
13 Pupil personnel department programs--special education teacher, etc. (3) (2)
14 Seminar, inservice program, workshops, lectures, conventions (8)
15 Guidance Clinic, Child Guidance Clinic (5)
16 Local hospital contacts (9)
17 Staff conferences (8)
18 Parents group of overactive children, or learning disabled children, CANHC (2)
19 Medical school, internship, residency (1)
20 Training in psychological services (1)
21 University courses, graduate work, etc. (1)
22 Research on the subject by the respondent (1)
23 T.V. and radio (13)
24 Encounter hyperkinetic children in my profession or pediatric experience (4)
25 Investigation of pharmaceutical treatment by authorities (10)
26 Professional opinions (6)
27 Papers and studies on the subject (6)
28 Books (6)
29 Other parents (2)
30 Uncertain--don't remember--no one source (16)
31 Nursing education (1)
32 Articles written by M.D.'s at Schenectady Guidance Clinic (6)
33 Nurses (5)
34 Stanford University reports (6)
35 Professional training (1)
36 Contact with parents (2)
38 Pediatrician's Desk Reference and drug company literature (14)
39 School system (3)
40 Statement of the school health and advisory committee of Orange County Medical Association on behavior modifying medication (10)
41 Freedman report (15)
43 Guidance counselor (3)

*Numbers in parenthesis indicate combinations of responses keyed to Question 3 (Table 10)

QUESTION 6 - "If you know about that report, how did it come to your attention?"

XX If Q5 is 1 or 2 and 6 is blank
YY Vague or unresponsive

01 Can't remember
02 Friend
03 Teacher
04 Discussions
05 T.V. and radio
06 Magazines
07 Professional literature and periodicals, and magazines re: children
08 Newspaper
09 Newsletter, handbills, etc.
10 Educational conference, seminar, workshop, convention
11 University course, graduate work, etc.
12 Doctor
13 Requested information
14 Report was mailed to me or to my office
15 Colleagues
16 PTA, community organizations
17 Medical Association committee
18 School principal, school system, school district office
21 Pharmaceutical literature
22 Gudiance Center, mental health clinic
23 American Academy of Pediatrics
24 Omaha World Herald
25 Pediatrics Magazine
26 This questionnaire

QUESTION 7 - "Did it help you to form your present opinion about the use of medication in managing hyperkinesis?"

Educators only - Did it change your attitude or methods of teaching, suspected hyperkinetic children? Please explain.

XX -No response (If category is 2 or 3 and Q5 is 1 or 2)
YY Uncodable
01 Yes, or a check
02 No, not at this teaching level, not applicable, vary with individual child
03 Thinking followed report--agreed
04 More insight in pinpointing or spotting a suspected hyperkinetic child
05 No change--just confirmation of my own attitude or prior opinion
06 Have learned not to accept medication as a substitute for needed teaching reforms
07 Much more understanding of the situation
08 Greater tolerance of deviant behavior
09 Modified my teaching methods, gave more verbal work, etc.
12 Disagreed
13 Major influence was M.D.'s working with this
16 Weighted in favor of drug use without enough evidence

QUESTION 12 - "Has there been any disagreement on strong objection to the use of medication for hyperkinetic children in this city? Explain.

01 No, none
02 No, not strong or yes, some, not clear on how much
04 Don't know
05 No strong objection but some parents and/or teachers need understanding among themselves
06 Teachers may suggest or put pressure on to have medication but M.D. should diagnose
07 Schools are used as scapegoats
08 Parents and teachers have been discussing uncertainties
09 Objections to children on medication being placed in regular classrooms
10 Educators use behavior control too loosely--mild objection (27 is stronger)
12 Yes, crank articles
13 Lack of correct information, misconstrued facts, false reports
14 Not enough media cov rage--poor communication
15 Overreaction due to ignorance
16 Newspapers said parents were critical of the administration of such medication
17 Newspapers reported wide use in schools
18 Misinformation has been a detriment to professional diagnosis
19 Public criticism and unfavorable media toward authorities
20 Washington Post reference to an Omaha organization called STAAR
21 Diagnostic and follow-up procedures are inadequate
22 M.D.'s succomb to ill-advised parental desires, or teacher desires
23 Political campaign of Senator Chambers--public pronouncements of Chambers
24 Issue was political
25 Opposition from minority leaders for publicity--alleged plot against their children
26 Minority students receive medication--mild opposition
27 Medication is an attempt to control and suppress child behavior, children are being drugged to subdue them, particularly minority children--strong opposition
28 No large minority in this city--no alleged connection between drugs & discrimination
29 Yes, sporatice, do sn't cite or remember particulars
30 Objection has resulted in a decrease in the use of drugs
31 Yes, by people who don't want to admit their child is imperfect
32 Objections were questionnable
33 Perhaps medication is unnecessary
34 Parents refuse to accept medication even on suggestion of M.D. or teacher
35 Fear unknown effects, not enough research into long-term effects, side effects
36 Fear of addiction, drug scene
37 Unsubstantial protest regarding use
38 P.T.A., Citizen committees, etc. not in favor of medication
39 Disagreement with medication on philosophic or humane grounds
40 A prominent neurologist has influenced parents and public with objections
41 Stress on drugs rather than looking for other means of modifying behavior, too anxious to resort to drugs, beg for medication as a cure-all
42 Omaha is where it all began!
43 Public misunderstanding
44 Schenectady recognizes problem, cooperating with treatment program by physicians
45 School nurses have complained
46 Anaheim Bulletin
48 Board of Education brought up matter to the public
49 No--educators and parents are being made aware of facts, not propaganda

QUESTION 12 - Con't.

50 Disagreement between teachers and M.D.'s
51 Wide newspaper coverage--pro's and con's
52 Influential newspaper coverage without balanced view
53 Newspaper articles against the use of drugs
54 Yes, everyone is talking about it--have or know of children on medication
55 Education politicians oppose drug use
56 Parents object to school psychologist's suggesting medication
57 Recent publications on hyperkinesis have caused concern
58 Because of suing district forbids recommending medication
59 Parents object
60 Yes, by minority groups
61 Some believe different type schools, not drugs are needed
62 Some object schools are white, middle-class, no meaning to minorities
63 Parents complain drugs given in school without consent
64 Teachers object
65 Psychologists and psychiatrist object
66 Lack of agreement among doctors causes confusion
67 Doctors unwilling to prescribe
68 Local doctor was ninvestigated or covered by the press
69 Some doctors are poorly qualified to diagnose this problem
70 Not enough facilities for proper treatment
71 Omaha World Herald
72 Brought up at a community meeting, but denied
73 Righest group opposition
74 Lack of public information
75 Time magazine
99 Yes

QUESTION 13 - "Are you interested in hyperkinetic children because of your job, or for any special reason?"

01 No
02 Yes, has a hyperkinetic child or suspected that he did
05 Yes, know a hyperkinetic child
06 Yes, sociological considerations
07 Yes, graduate work, university course, etc.
09 No special interest--general interest in child education and welfare
10 No, not interested unless my child was hyperkinetic
12 Yes, as a classroom teacher
13 Yes, as a special educator
14 Yes, as a school nurse
15 Yes, as a school psychologist
16 Yes, as a clinic employee, administrator, therapist, unspecified
17 Yes, as a neurologist
18 Yes, as a pediatrician
19 Yes, as a psychiatrist
20 Yes, as a psychologist
21 Yes, as a G.P., family doctor
22 Yes, as an M.D., unspecified
23 Yes, as a psychotherapist
24 Yes, as a social worker
25 Yes, as a guidance counselor
26 Yes, as a home economist
27 Yes, as a nurse
29 Yes, personal reasons
30 Yes, am interested in children receiving a less structured, confining education
31 Yes, opposed to medication to make restless children still
32 Yes, no comment
33 Yes, because of number of children with these symptoms being helped, because of my profession (profession not stated), and because of interest in knowing about backgrounds of children
34 Yes, as a school otologist
35 Through physician friends
36 Yes, as a sociologist
37 Yes, as an OB-GYN
38 Yes, as a school principal, board member, or member of the administration
39 Yes, because of implications and improper use of drugs
40 Yes, as a law officer
41 Yes, as a clergyman

QUESTION 14 - "Looking back, can you see any mistakes which have been made in your community in handling the treatment of hyperkinesis, or the issues which surround it?"

XX No response
YY Not responsive
01 Not, not that I know of
02 Yes
03 Don't know
04 Unaware of the issues surrounding hyperkinesis--not aware of a problem
05 Yes, but no elaboration
06 Educators use behavior control too loosely
07 Overly structured confining educational system has created hyperkinetics
08 Teachers put pressure on to have treatment (medication for a student and some prescriptions given at demand of school (or suggestion) instead of of parent or doctor
10 Lack of understanding by teachers--they don't understand the child's behavior
11 Teacher refusal to help find solution
12 Lack of cooperation between teachers and M.D.'s (drug or behavior problem?)
13 Teachers and psychologists are reluctant to suggest an examination--don't want to have to defend
14 Lack of understanding between parents and school system or teachers
15 No special education programs or not enough facilities for hyperkinetics
16 Not enough training or information for teachers to cope with this problem
17 Media unfavorable
18 Public recognition of unqualified individuals on the subject of hyperkinesis
19 Too much publicity about a small medical problem
20 Not enough publicity
21 Not enough publicity in the early stages of the use of the drug
22 Media was poorly informed about medication; misconstrued issue and facts
23 Lack of public information and education for parents and others (ignorance of the problem)
24 Washington Post wrote a biased report destroying the work of leading men
25 M.D.'s succomb to ill-advised parental desires
26 Lack of proper follow-up and diagnosis
27 Not enough center or clinics to service the area--lack of finances, etc.
28 General practice has been very conservative
29 Issue was a political football, M.D.'s used by politicians
30 Not enough research into the problem
31 Not enough research on long term effects
32 Misuse of the term
33 Excess enthusiasm about effectiveness, too much stress on medication, used too often
34 Tendency to rely on drugs along without looking for other means (behavior modificatio
35 Drugs may have been used too frequently about 3 years ago
36 Very few educators and doctors are seriously concerned about the problem
37 Some children are overlooked who could be helped
38 We have special programs for hyperkinetic children
39 Gross overstatements
40 On-off use of the drug is a poor way to handle the problem
41 Previously children were viewed as psychological problems and unmanageable
42 Only those who work with these children daily can know the value of medication
43 Objections to placing hyperkinetic children in regular classrooms
44 Past treatment of hyperkinesis has been along the corporal punishment lines

45 Many isolate one situation and generalize
46 New ways need to be found to reach over active children
47 Unfair, unscientific publicity
48 Publicity caused parents to resist treatment
49 Children put on drugs who have no psychological disorders
50 Prescribing without proper testing and evaluation
51 Opposition to medication by those who are not aware of the problems of MBD
52 Amateur advise instead of referrals to M.D.'s
53 Need more feedback from parents and teachers
56 Sensationalism
57 M.D.'s failure to familiarize themselves with MBD
59 M.D.'s did not defend teachers who correctly suggested medication
60 Poor city-wide planning of programs
61 The fact that drugs are used at all, opposed to all medication
62 Focus on low-income minority groups
63 Stress on medication could create drug dependence
64 Too many objections to name
65 City should get rid of Child Guidance Center
66 M.D.'s made poor responses to press and public
67 Earlier diagnosis could have helped some children

QUESTION 15 - "Have you any criticisms of the Freedman Report (Report of the Conference on the Use of Stimulant Drugs in the Treatment of Behaviorally Disturbed Young School Children)?"

XX No response
YY Not responsive, vague, uncodable
01 No, haven't read the report
02 Yes, no further comment
03 Not familiar with the report enough
04 Report should have been more widely publicized
05 Would like a copy of the report
06 Nothing new in the report
07 Good for laymen
08 Feel that medication is an acceptable means
09 I am skeptical of anything put together by a committee
10 Helps physicians avoid fears of litigation
11 More classroom teachers should have been involved in the conference
12 No, I concur with the report
13 Very comprehensive whether I agree or not
14 Caused alarm, made many reject needed therapy, stressed early withdrawal
15 Yes, we cannot be so specific in sleecting patients who will respond
16 Could be harmful if misinterpreted
17 Failed to stress need for training non medics
18 Study not broad enough--insufficient sampling and statistics can be manipulated
19 Seemed to be a reasonable summation of existing practices and knowledge
20 Too vague
21 If writers of the Freedman Report had to deal with parents and children they would see how feeble their efforts were
22 Should stress socio-economic causes
25 Need for continued research and follow-up on children
27 Fine for professionals--but not for educating the public

ATTACHMENT J

Tables 18 - 28

TABLE 18

Questionnaire 2, Question 13

Explanations of Interest in Hyperkinetic Children

	Identity						
	Medical	Special Educator	Classroom Educator	Leader	Special Parent	Layman	Random Laymen
Are you interested in hyperkinetic children because of your job, or for any special reason?							
No	21	-	4	3	2	19	6
Yes, unspecified	5	11	4	-	2	1	-
Has or knows a hyperkinetic child	7	12	11	14	40	29	3
Yes, because of my profession	164	121	78	46	4	28	4
General interest in child welfare	18	7	8	10	5	23	7
Favor unstructured education	-	-	-	-	-	1	-
Opposes medication to control children	1	-	-	-	-	4	-
Fear of misuse of drugs	-	-	-		-	-	-
Blanks and missing information	38	22	50	41	1	89	30
TOTAL NUMBER OF COMMENTS	254	173	155	114	54	194	50

TABLE 19

Questionnaire 2, Question 1

Respondents Aware of Medication in Management of Hyperkinesis, by City

	1	2	3	4	Total
Aware of medication	81%	68%	67%	77%	74%
Not aware of medication	19%	32%	33%	23%	26%
Total number of persons	[188]	[170]	[206]	[348]	[912]

TABLE 20

Questionnaire 2, Question 2

Opinions about the Nature of Hyperkinesis

	City				
	1	2	3	4	Total
Hyperkinesis is:					
Not an abnormality	7%	15%	13%	10%	11%
A learning disability	69	47	52	63	59
Missing information	5	6	3	4	5
Blank questionnaires	19	32	32	23	26
Total number of persons	[188]	[170]	[206]	[348]	[912]

TABLE 21

Questionnaire 2, Question 8

Opinions about the Use of Medication by City

	City				
	1	2	3	4	Total
Medication is:					
Usually wrong	2%	3%	6%	3%	4%
Right used carefully	75	64	59	70	67
Usually right	3	1	1	3	2
Missing information	1	-	1	1	1
Blank questionnaires	19	32	33	23	26
Total number of persons	[188]	[170]	[206]	[348]	[912]

TABLE 22

Questionnaire 2, Question 9

Impressions of Syndrome, by City

		City			
		1	2	3	4
Cause is often organic	YES	75%	53%	51%	63%
	NO	5	11	13	10
	◊	*	4	4	4
	BLANK	19	32	33	23
Cause is often behavioral	YES	49	42	39	38
	NO	29	19	23	31
	◊	3	7	6	8
	BLANK	19	32	33	23
Cause is often social	YES	23	31	24	21
	NO	52	33	35	49
	◊	6	5	8	8
	BLANK	19	32	33	23
Cause is often poor schools	YES	8	11	10	7
	NO	70	52	51	66
	◊	3	5	6	4
	BLANK	19	32	33	23
Term means child is normal but active	YES	15	20	18	18
	NO	63	45	43	55
	◊	4	4	6	4
	BLANK	19	32	33	23
Term means poor teaching	YES	7	8	8	7
	NO	72	56	54	67
	◊	2	4	5	4
	BLANK	19	32	33	23
Term is used in suppressing children	YES	7	7	8	6
	NO	73	55	53	66
	◊	2	6	5	6
	BLANK	19	32	33	23
Trait may be a desirable adaptation in minorities	YES	5	5	6	8
	NO	71	57	54	61
	◊	5	6	7	8
	BLANK	19	32	33	23

◊ - Missing information

TABLE 23

Questionnaire 2, Question 10

Opinion of Medication, by City

		City			
		1	2	3	4
Question means:					
Stimulant drugs are a proper treatment	YES	88%	77%	79%	85%
	NO	7	18	19	8
	BLANK & ◊	5	5	2	7
Never proper to tamper with mind	YES	4	10	12	6
	NO	90	84	79	87
	BLANK & ◊	6	6	9	7
Medication leads to drug addiction	YES	3	6	8	2
	NO	94	85	85	88
	BLANK & ◊	3	9	7	10
Hyperkinetics should not be changed	YES	4	3	7	5
	NO	92	92	87	89
	BLANK & ◊	4	5	6	6
Medication only masks symptoms	YES	4	7	13	6
	NO	90	87	82	87
	BLANK & ◊	6	6	5	7

TABLE 24

Questionnaire 2, Question 10

Opinion of Medication, by Professional Identity

		Identity						
		Medical	Special Educator	Classroom Educator	Leader	Special Parent	Layman	Random Laymen
Question means:								
Stimulant drugs are a proper treatment	YES	78%	72%	58%	48%	94%	44%	33%
	NO	6	10	9	13	-	11	8
	◊	4	6	1	4	4	3	-
	BLANK	12	12	31	36	2	43	
Never proper to tamper with mind	YES	5		7	7	9	6	6
	NO	78		56	56	85	51	35
	◊	5		2	2	4	*	-
	BLANK	12	12	31	36	2	43	59
Medication leads to drug addiction	YES	2		1	3	2	7	2
	NO	81		61	55	89	46	37
	◊	5		6	7	6	4	2
	BLANK	12	12	31	36	2	43	59
Hyperkinetics should not be changed	YES	*		1	6	6	6	4
	NO	83		63	56	89	47	37
	◊	4		4	3	2	4	-
	BLANK	12	12	31	36	2	43	59
Medication only masks symptoms	YES	3		5	7	4	8	8
	NO	81		59	56	91	44	33
	◊	4		5	2	2	5	-
	BLANK	12	12	31	36	2	43	59

TABLE 25

Questionnaire 2, Question 11

Opinion of Past Local Practice, by City

		City			
		1	2	3	4
Question means:					
Drugs have been prescribed by non-physicians	YES	12%	27%	15%	11%
	NO	75	55	73	72
	BLANK & ◊	13	18	12	17
Diagnosis has been made by unqualified physicians	YES	35	46	32	18
	NO	48	37	51	60
	BLANK & ◊	17	17	17	22
Schools exerted improper pressure	YES	20	41	29	14
	NO	71	44	62	72
	BLANK & ◊	9	15	9	14
Drugs have been used to control minorities	YES	4	12	12	2
	NO	87	71	78	82
	BLANK & ◊	9	17	10	16
Drugs have been used to limit superior students	YES	-	-	5	1
	NO	95	87	88	89
	BLANK & ◊	5	13	7	10

TABLE 26

Questionnaire 2, Question 11

Opinion of Past Local Practice, by Professional Identity

		Identity						
		Medical	Special Educator	Classroom Educator	Leader	Special Parent	Layman	Random Laymen
Question means:								
Drugs have been prescribed by non-physicians	YES	16%	5%	8%	14%	9%	11%	10%
	NO	60	71	49	43	85	32	20
	◊	24	24	43	43	6	57	69
Diagnosis has been made by unqualified physicians	YES	40	20	10	23	13	14	10
	NO	33	52	36	34	77	24	22
	◊	27	28	54	43	11	61	67
Schools exerted improper pressure	YES	30	14	6	18	11	14	12
	NO	49	71	54	41	81	30	18
	◊	21	14	41	41	8	56	69
Drugs have been used to control minorities	YES	4	4	1	5	-	7	10
	NO	74	75	55	55	85	38	25
	◊	22	21	44	41	15	55	65
Drugs have been used to limit superior students	YES	*	-	-	2	--	2	2
	NO	80	81	63	59	89	44	33
	◊	19	19	37	39	11	54	65
								2

◊ - indicates missing information

TABLE 27

Questionnaire 2, Question 12

Perceived Controversy over Use of Medication, by City

	City			
	1	2	3	4
Has there been any disagreement or strong objection to the use of medication for hyperkinetic children in this city?				
NO (or equivalent statement)	32%	33%	11%	62%
YES (no bias)	19	19	27	16
YES (opposing or expressing reservation about medication)	8	20	17	8
YES (favoring medication)	3	7	17	1
YES (critical of media communication)	28	4	25	5
YES (others)	10	17	3	8
TOTAL YES & NO*	[145]	[95]	[146]	[226]

*Total indicates number of responses, not number of persons.

TABLE 28

Questionnaire 2, Question 14

Evaluation of Local Experience, by City

	City			
	1	2	3	4
Can you see any mistakes which have been made in your community...?				
Yes, poor professional practice	11	10	9	15
Yes, medication should not have been used	-	-	1	2
Yes, approach more conservatively	24	9	19	26
Yes, no bias regarding treatment made	21	11	18	20
Yes, more active program needed	24	17	14	30
Yes, poor public information	38	24	38	36
No	35	19	26	79
Blanks and missing information	35	80	81	140
TOTAL	188	170	206	348

LITERATURE OF HYPERKINESIS

This section deals with the literature on hyperkinesis and the uses made of this material. While this study was not intended to analyze the content of scientific literature, a measure of its volume, content and use is relevant since these are the principal manifestations of communication.

Two indicators of interest in the hyperkinetic child may be found in the publications and use of professional literature on this topic. We have collected in the course of this project more than 1,000 references or copies of communications on the subject. These range from scientific, medically oriented publications found in the journals of medicine and psychiatry to transcripts of media presentations, radio, television and newspapers.

The developing research interest in the period since 1966 is well illustrated in the rate of increase of scientific publications processed by the MEDLARS system at the National Library of Medicine (See Figure 1). This figure must be interpreted as a reflection of material selected by the MEDLARS system. It does not represent the total volume of literature published during the years 1965-1971. The *Freedman Report* does not appear in *Index Medicus*, although a brief discussion of it was selected from *Science* (26 March 1971) and was cited by the *Index* in May 1971.

The volume of material found in a similar search of the *Education Index* showed that the literature of education selected for announcement through that information service has not incre sed in volume or rate during the 1965-1971

period in parallel with medical literature (See Figure 2). The professional communication in education has clearly not reflected the magnitude of the problem. The total amount of professional literature in education has, however, increased considerably as hyperkinesis has become more widely recognized. Examination of the *Psychological Index* has shown that a similar growth in the literature of psychology has also been taking place.

A study of the requests made to the Education Research Information Center (ERIC) that collects and announces research reports on this topic reveals how little that service was used over the period of interest. As events occurred during the time of principal public concern, a change in the profile of requests to ERIC would have been natural. Table 29 shows that no change occurred. It appears that ERIC was not a central source of information for educators when public concern about hyperkinesis and the schools was most active and media discussion of the issues was being presented.

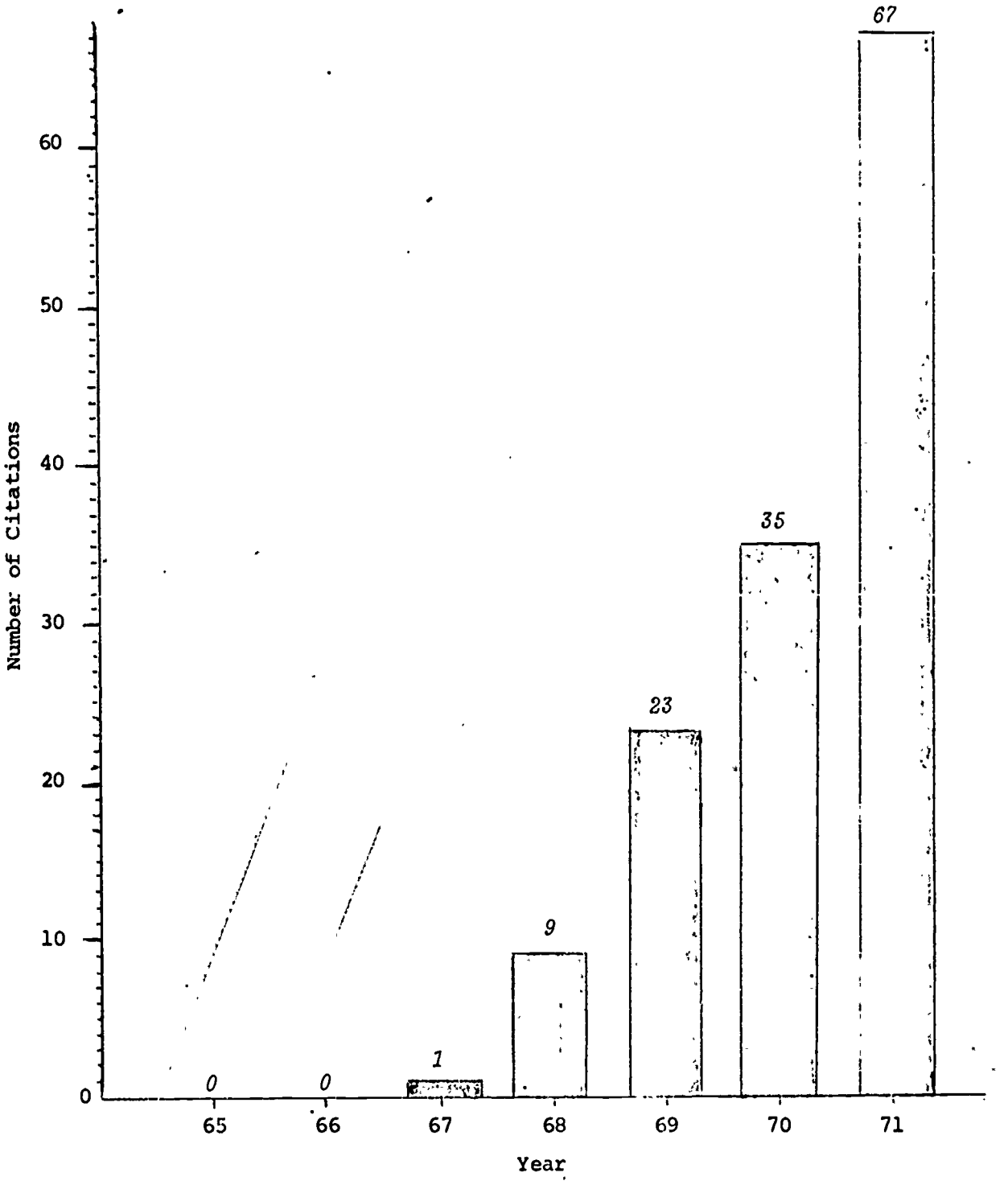
TABLE 29

Requests for Information Received by ERIC/CEC which Possibly Relate to Minimal Central Processing Dysfunction in Children
March - November 1970

Date	Area	Identification	Parent of LD Child?	Mentions MBD or equivocal term?	Mentions medication?	Oppose or favor medication?	Mentions behavior modification?	Specific comment
3/4	Upstate N.Y.	Teacher	-	-	-	-	-	
3/5	Ohio	Parent	Yes	Yes	-	-	-	
3/9	California	P.T.A.	-	-	-	-	-	
3/30	Ohio	Parent	Yes	Yes	Yes	-	-	
4/1	Wisconsin	Parent	Yes	Yes	-	-	-	
5/15	Mississippi	Parent	Yes	-	-	-	-	
5/17	Maryland	Parent	Yes	Yes	-	-	-	
5/17	Hawaii	Parent	Yes	-	-	-	-	
5/19	Florida	Parent	Yes	Yes	Yes	-	-	
5/20	Indiana	Parent	Yes	-	-	-	-	
5/27	California	Parent	Yes	Yes	Yes	-	-	
6/6	New York city	Parent	Yes	-	-	-	-	Omaha report
7/29	Illinois	Insurance Actuary	-	Yes	-	-	-	
7/29	Illinois	Researcher	-	Yes	Yes	-	Yes	
7/30	Texas	Student	-	Yes	Yes	-	-	
8/1	Ohio	Parent	Yes	Yes	-	-	-	
8/14	Illinois	Unidentif.	-	Yes	-	-	Yes	
8/21	New Hampshire	Parent	-	-	-	-	-	Learning Disabilities
8/30	Texas	Parent	Yes	Yes	-	-	-	
9/4	Maryland	M.D.	-	Yes	-	-	-	
9/7	New Jersey	CIBA	-	Yes	-	-	-	
9/23	Massachusetts	Teacher	-	Yes	-	-	-	H.R. Hearings
10/10	Upstate N.Y.	Parent	Yes	Yes	-	-	-	
?	Maryland	Parent	Yes	Yes	-	-	-	
10/16	Texas	Parent	Yes	Yes	-	-	-	
10/20	Upstate N.Y.	Teacher	-	-	-	-	Yes	
10/21	Iowa	Student	-	Yes	-	-	-	
11/1	Maryland	Parent	Yes	Yes	-	-	-	MBD
11/3	Upstate N.Y.	Librarian	-	Yes	-	-	-	Minimal dysfunction
11/9	Florida	Student	-	Yes	Yes	-	-	Learning Diabilit.
X	California	Parent	Yes	Yes	-	-	-	Hyperactive problem
11/12	New York City	Teacher	-	Yes	-	-	-	Brain injured
11/18	Pennsylvania	Unidentif.	-	Yes	-	-	-	

Figure 1

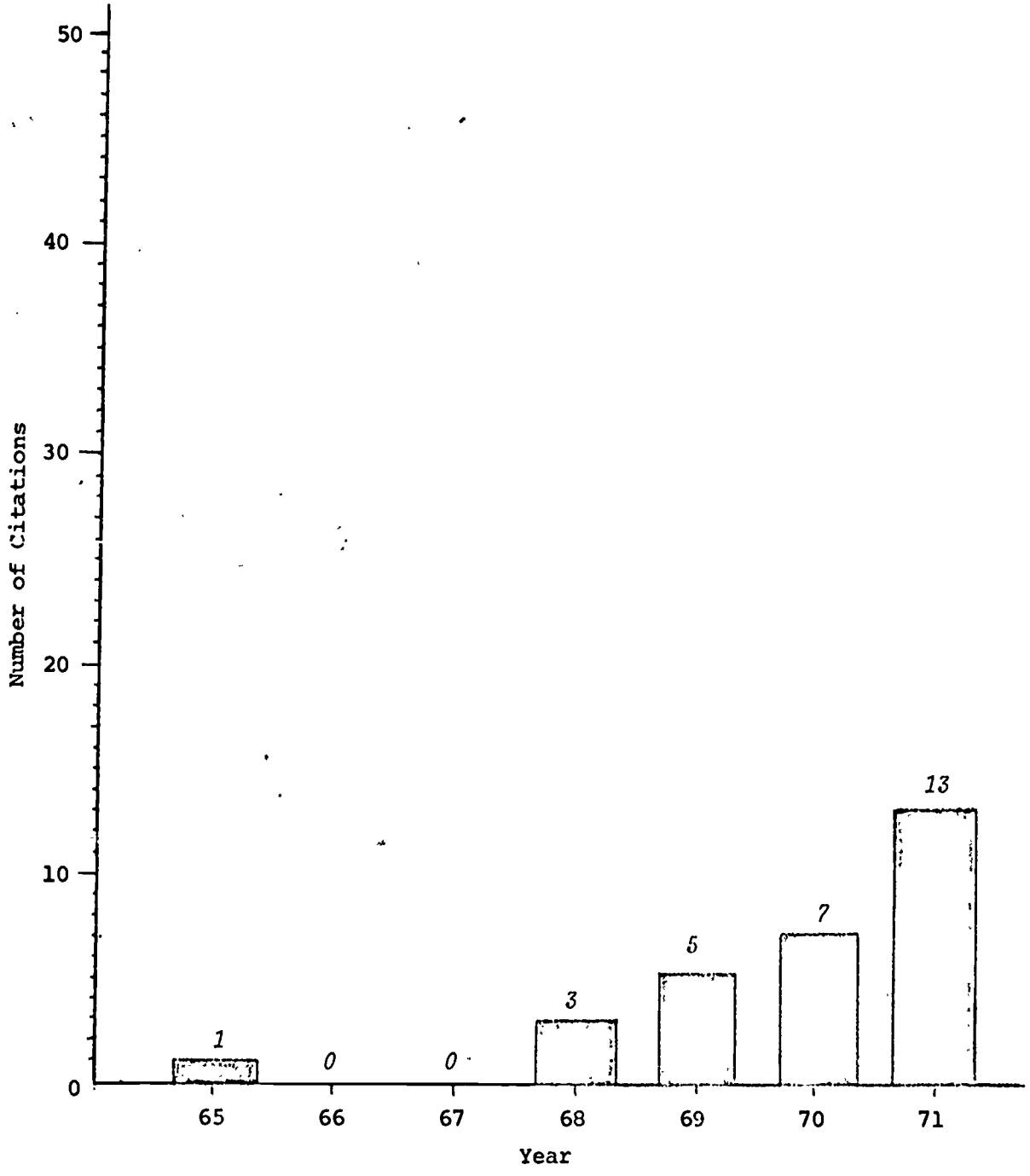
Search of Index Medicus for Journal Articles*
1965 - 1971



*Descriptors equivalent to: M.D/Hyperkinesis/Amphetamine/Ritalin/Medication therapy for neurological dysfunction. Therapy for specific learning disability.

Figure 2

Search of Educational Index for Journal Articles*
1965 - 1971



*Descriptors equivalent to: MBD/Hyperkinesis/Amphetamine/Ritalin/Medication therapy for neurological dysfunction. Therapy for specific learning disability.